

U.S. Census Bureau

**Data Access and Dissemination System (DADS) II  
System Requirements Document (SRD)**

Draft

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## **1. INTRODUCTION**

The Data Access and Dissemination System (DADS) Program is managed by the Decennial Systems and Contract Management Office (DSCMO), within the United States Census Bureau.

The DADS Program is responsible for the dissemination of official demographic and economic information for the U.S. Census Bureau via the Internet. In fulfilling its mission, the DADS Program provides both tabulation and dissemination services to the Census Bureau. Tabulation services refer to the activities related to aggregating data collected on individual responses to a survey or census into summarized statistical data suitable for public release. Dissemination services refer to the activities related to the internal staging and release of approved statistics to the Internet. These services include the provision of interim results or output for other areas of the Census Bureau to process and release in different media and formats, such as CD-ROM and DVD, File Transfer Protocol (FTP), or Adobe Acrobat (PDF) for printed publications. The DADS Program currently provides tabulation and dissemination services for the Decennial Census; it provides only dissemination services for the Economic Censuses and Surveys, annual Economic Surveys, the annual release of the American Community Survey (ACS), the annual release of the Puerto Rico Community Survey (PRCS), and the annual release of the Population Estimates.

The DADS Program developed and maintains a suite of inter-related systems including the American FactFinder (AFF) system for dissemination of data and products, the Data Product Production (DPP) system for Census 2000 product tabulations, and the Advanced Query (AQ) system for Census 2000 ad hoc queries against respondent level data (microdata).

The DADS Program has identified program level requirements for a modernized system to offer uninterrupted tabulation and dissemination services to its customers. The modernized system must also meet overall program goals and objectives to increase user satisfaction, improve operational efficiencies, and control costs.

### **1.1 Purpose**

The purpose of the System Requirements Document (SRD) is to document the complete set of DADS program level requirements for tabulation and dissemination. The requirements are uniquely identified and organized in several artifacts, as presented in Appendices A through I.

The artifacts include a Requirements Traceability Matrix (RTM), also known as an Action/Object Matrix, for tabulation and dissemination (Appendices A and D respectively). Both matrices were developed from a detailed analysis of current and planned DADS requirements. They describe the set of required actions to be performed on the required data objects. The explicit requirement statements, derived from the matrices are presented in corresponding lists of Requirement Statements (Appendices B and E). In addition, the descriptions for the tabulation and dissemination objects are presented in corresponding tables of Object Descriptions (Appendices C and F). Additional tabulation and dissemination non-functional requirements are provided in Appendix G.

## 1.2 Scope

The scope of the SRD is to document the initial requirements baseline for a modernized suite of tools to support the tabulation and dissemination operations of the DADS Program. The requirements were derived from current system documentation reviews and further validated and reviewed by internal Census Bureau stakeholders. The SRD links to the DADS program goals and objectives to establish backward traceability.

The SRD forms the basis upon which the Contractor will establish detailed system level requirements. The Contractor **shall** document all of the detailed requirements in an expanded RTM, as part of the Systems Requirements Specification (SRS). The Contractor **shall** also ensure that all versions of the SRS maintain backward traceability with the SRD throughout the DADS system life cycle.

## 1.3 Goals and Objectives

The goals and objectives for the DADS Program are shown in Table 1-1. Each of the requirements presented in this SRD will be mapped to the goals and objectives.

**Table 1-1. DADS Goals and Objectives**

Goals	Objectives
1. Maximize the efficiency, timeliness and accuracy of the tabulation and dissemination processes	<ol style="list-style-type: none"> <li>1. Meet all legal deadlines and external commitments</li> <li>2. Contribute to the overall improvement of the quality and accuracy of the data and data products</li> <li>3. Reduce the elapsed time required to produce releasable data and products</li> <li>4. Simplify and standardize the processes for tabulation and dissemination</li> <li>5. Maintain or improve business continuity of tabulation and dissemination operations in a changing environment</li> </ol>
2. Minimize the cost of tabulation and dissemination	<ol style="list-style-type: none"> <li>1. Implement process improvement initiatives to drive down the cost of tabulation and dissemination</li> <li>2. Collaborate with other Census Bureau organizations that perform tabulation and dissemination in order to reduce cost</li> <li>3. Leverage existing investments, processes and systems within the Census Bureau</li> </ol>
3. Enhance end-user satisfaction with tabulation and dissemination products and services	<ol style="list-style-type: none"> <li>1. Ensure management and control of data privacy and confidentiality</li> <li>2. Maintain high system availability</li> <li>3. Increase user satisfaction with their ability to find and acquire Census Bureau data and data products</li> <li>4. Increase user satisfaction with the usefulness and relevance of Census Bureau data and data products</li> <li>5. Develop new, more useful data products and services using existing Census Bureau data</li> <li>6. Strengthen the effectiveness of secondary distributors of Census Bureau data and data products</li> </ol>

## 1.4 Audience

The SRD audience includes the DADS Program, Census Bureau stakeholders, and the Contractor.

## 1.5 Document Organization

The SRD is organized as shown in Table 1-2.

**Table 1-2. Document Sections**

Section	Description
1. Introduction	Describes the purpose, scope, goals and objectives, audience, and document organization
2. Overall Description	Describes the DADS II perspective, functions, user characteristics, operating environment, constraints, assumptions and dependencies
3. Product Deliverables	Describes tabulation and dissemination product deliverables
4. Specific Requirements	Describes the specific requirements
5. Requirements Traceability	Approach for establishing and maintaining requirements traceability
Appendix A: Tabulation Action/Object Matrix	Highlights the relationships between the actions and the objects for tabulation data
Appendix B: Tabulation Functional Requirement Statements	List of uniquely identified tabulation functional requirements
Appendix C: Tabulation Object Definitions	Describes the tabulation objects
Appendix D: Dissemination Action/Object Matrix	Highlights the relationships between the actions and the objects for dissemination data
Appendix E: Dissemination Functional Requirement Statements	List of uniquely identified dissemination functional requirements
Appendix F: Dissemination Object Definitions	Describes the dissemination objects
Appendix G: Non-Functional Requirements: Tabulation and Dissemination	Description of the non-functional requirements.
Appendix H: Tabulation Product Deliverables	Detailed list of tabulation product deliverables
Appendix I: Dissemination Product Deliverables	Detailed list of dissemination product deliverables
Appendix J: Document References	List of applicable reference documents
Appendix K Acronyms	Alphabetic list of acronyms
Appendix L: Glossary	Alphabetic glossary of terms

## 2. OVERALL DESCRIPTION

The United States Bureau of the Census is a bureau of the U.S. Department of Commerce (DOC) and is one of several principal federal agencies that provide statistical services. The Census Bureau is charged with providing ongoing measures of the U.S. population and its economy. The Census Bureau, which supports the economic and political foundations of the United States, provides a critical service to the nation. Therefore, reliable collection, preparation, tabulation and dissemination of demographic and economic statistics are vital to the Census Bureau's overall mission and strategic goals and objectives.

Relevant, accurate and timely statistics support decision making at every level of government. These statistics allow for the administration and equitable funding of many federal, state, and local programs and are used to fulfill constitutional and legislative mandates. One example is Article 2, Section 1 of the Constitution that requires an enumeration of the population every 10 years to apportion the seats in the House of Representatives among the states. States use this data to redraw their legislative districts. Legislators, policy makers, educators, planners, businesses, non-profit organizations, and the general public on a daily basis also use statistics collected and disseminated by the Census Bureau for numerous purposes.

Other important Census Bureau measures are part of the fabric of today's information age. These measures include monthly housing starts, new home sales, the monthly unemployment rate, the balance of trade, the poverty rate, and construction spending.

The management of Census Bureau data tabulation and dissemination processes presents a number of unique challenges:

- Volume and complexity of the data that must be tabulated
- Variety and complexity of the data that must be disseminated
- Uniqueness of the statistical techniques for aggregate calculations
- Overlay of techniques to protect the confidentiality of respondents
- Complexity of preparing intermediate products
- Complexity of geographic hierarchies
- Diversity of data users and their information needs

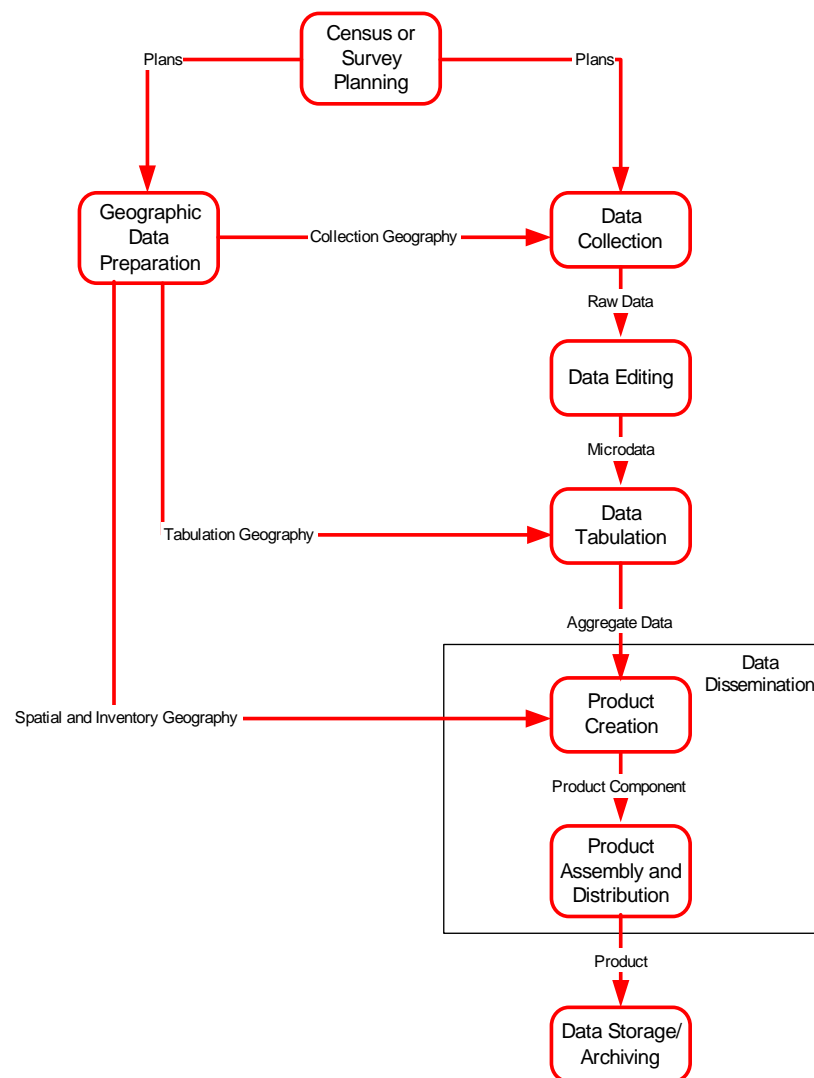
These issues are discussed further in Section J-9, "Data Access and Dissemination Systems Office: An Overview".

The DADS Program requires accuracy in the tabulation and dissemination results. The DADS Program also requires the security of its systems, the protection of the confidentiality of survey and census respondents, and user satisfaction with the data products and systems.

### 2.1 Census or Survey Business Process Flow

Figure 2-1 highlights the generalized process used by the Census Bureau to plan, collect, edit, tabulate and disseminate the results of a survey or census. The details of each step in the process vary depending on the particular census or survey being implemented.





**Figure 2-1. Census or Survey Business Process Flow**

The DADS Program is responsible for tabulation and dissemination activities for the censuses and surveys identified in Section 2.2, Directorate Program Areas. Specific requirements for each census or survey will vary according to the design and overall dissemination goals for a particular program or directorate.

### 2.1.1 Census or Survey Planning

Census or survey planning activities cover the entire process of a census or survey. While overall census and survey planning activities are not initiated by the DADS program, DADS staff participates in those activities. The activities range from questionnaire design, sample design, data collection design, data processing and editing, data tabulation and summarization, and final aggregated data product design and dissemination. The planning, collection and processing activities precede tabulation and dissemination, and therefore impact the specific requirements for any given product.

### **2.1.2 Geographic Data Preparation**

Geographic data preparation includes maintaining current governmental unit boundaries for the numerous geographic areas for which the Census Bureau collects and publishes data. Separate statistical geographic areas are also defined in collaboration with state and local governments. Geographic data support the collection, editing, tabulation, and dissemination activities. Dissemination inputs include the spatial data files and geographic inventory data files.

The DADS Program does not perform geographic data preparation.

### **2.1.3 Data Collection**

Data collection is the process by which answers to questions for a particular survey or census are collected from individual households, persons, or businesses. Various methodologies are utilized such as mailing questionnaires, telephone follow-up, and personal visits. The responses are recorded in a machine-readable format for further processing.

The DADS Program does not perform data collection.

### **2.1.4 Data Editing**

Data editing converts the respondent level data from the data collection process into a “clean”, confidential, microdata input file ready for data tabulation. Specific activities during this phase include data imputation, consistency checking, and weighting.

The DADS Program does not perform data editing.

### **2.1.5 Data Tabulation**

Tabulation is the process by which respondent level data from confidential microdata files, delivered from the data editing process, are aggregated into approved product formats suitable for public release. Data tabulation products are created from full, confidential microdata files that contain data about individual persons, households, or businesses. These confidential data are protected by Title 13 and are not made available to the public. Data tabulation consists of acquiring product specifications and geographic input files necessary to fully tabulate a data product.

The DADS Program and other areas of the Census Bureau perform data tabulation. Details of individual products and files for which the DADS Program is responsible and their specific tabulation dates can be found in Appendix H.

### **2.1.6 Data Dissemination**

Data dissemination consists of acquiring the metadata, product specifications, and geographic input files necessary to fully stage a product. The dissemination process also provides the system functions necessary to select, search, print, display, manipulate, and download the various components of approved product formats of Census Bureau published data.

The DADS Program requires that data and products be staged to an internal environment prior to public release. The Census Bureau uses this environment to review the data content for accuracy and completeness prior to public release. The process and timing of the public releases vary according to the requirements for each product. Upon approval, the data are released to the Internet or to other areas of the Census Bureau for processing onto various media formats.

Data dissemination is performed by the DADS Program and other areas of the Census Bureau. Details of individual products and files for which the DADS Program is responsible and their specific release dates can be found in Appendix I.

#### **2.1.6.1 Product Creation**

During product creation, aggregate data from the data tabulation process is used to build product components. Public-use microdata files are also released after further editing to guarantee respondent confidentiality.

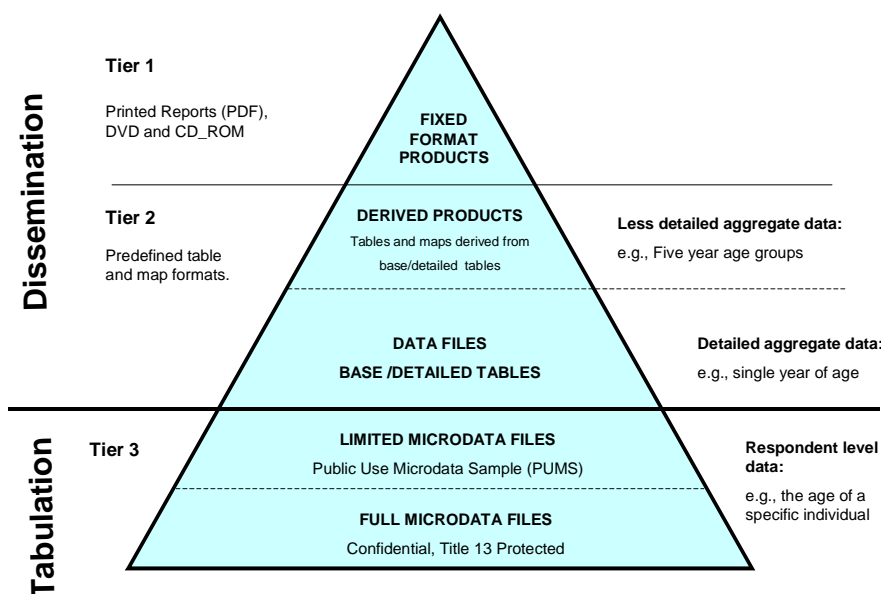
#### **2.1.6.2 Product Assembly and Distribution**

During product assembly and distribution, data products are identified, staged, and distributed by the DADS Program via the Internet. The Administration and Customer Services Division (ACSD) assembles and distributes the same or similar products in various media, including CD-ROM and DVD.

#### **2.1.7 Data Transformation**

Figure 2-2, Data Hierarchy illustrates the relationship between the data tabulation activity and the data dissemination activity. The three-level hierarchy shows the transformation of respondent level microdata files in Tier 3 into aggregated data in Tier 2. The first level of aggregated data products in Tier 2 are the base tables, detailed tables, and data files. These products provide the most detailed aggregations of data made available to the public. During the dissemination process, additional derived products are created from the base tables and detailed tables.

Derived products consist of further summarized data presented in a table or map format. The derived products from Tier 2 are released with their source base tables as discrete data files. The base tables and the derived products are replicated in Tier 1 during the Product Assembly and Distribution Process as static, fixed format products on a variety of media.



**Figure 2-2. Conceptual Data Hierarchy**

## 2.2 Directorate Program Areas

Currently, the DADS Program provides tabulation and/or dissemination services to four directorates within the Census Bureau: Decennial, Demographic, Economic and Communications. Additional areas of the Census Bureau may require tabulation and/or dissemination services of the DADS program over the life of the DADS II Contract. The program areas within each directorate have the functional and subject matter expertise required for the design, collection, processing, tabulation, and dissemination of censuses, surveys, projections, and estimates.

The following sections list the major products and services supported by the DADS Program. The sections include prior products released under the DADS Program and future work expected to be covered under the DADS II contract.

### 2.2.1 Decennial Directorate

The Decennial Directorate (see Table 2-1) is responsible for the Decennial Census of Population and Housing for the United States, Puerto Rico, and the Island Areas. The Decennial Census fulfills constitutional, legislative and programmatic mandates. The 2010 Decennial Census will include the results from the American Community Survey (ACS), a nationwide, annual demographic survey.

**Table 2-1. Decennial Directorate**

Program	Periodicity	Years Supported	Tabulation Services	Dissemination Services
Decennial Census	Every 10 years	1990 – United States	No	Yes
		2000 – United States and Puerto Rico	Yes	Yes
		2000 – Island Areas	No	Yes
		2000 – Puerto Rico (Spanish)	No	Yes
		2010 - United States, and Puerto Rico	Yes (includes support for CD-ROM/DVD)	Yes (includes support for printed publications)
		2010 – Island Areas	Yes	Yes
	Annual	American Community Survey 2000 – 2016 United States	TBD	Yes
	Through the decade	Special Tabulations	Yes case by case	TBD case by case
	Annual	Puerto Rico Community Survey 2005 – 2016 English	TBD	Yes
		2005 – 2016 Spanish	NA	Yes

### 2.2.2 Demographic Directorate

The Demographic Directorate (see Table 2-2) is responsible for numerous demographic surveys to profile and measure the people, housing, and institutions of the Nation. They also compile and release the annual population and housing estimates and population projections.

**Table 2-2. Demographic Directorate**

Program	Periodicity	Years Supported	Tabulation Services	Dissemination Services
Population Estimates	Annual	2001-2016 – United States and Puerto Rico	No	Yes (part)
Special Tabulations	Every 10 years	2000 School Districts	Yes	No

### 2.2.3 Economic Directorate

The Economic Directorate (see Table 2-3) is responsible for the quinquennial economic census for the United States, Puerto Rico, and the Island Areas, as well as numerous annual, quarterly and monthly surveys. The census and surveys are designed to measure the Nation's economy and provide information on federal, state, and local governments.

**Table 2-3. Economic Directorate**

Program	Periodicity	Years Supported	Tabulation Services	Dissemination Services
Economic Census	Every 5 years	1997 – United States	No	Yes (part)
		2002 – United States	No	Yes

Program	Periodicity	Years Supported	Tabulation Services	Dissemination Services
		2002 – Puerto Rico and Island Areas	No	Yes
		2007 – United States	No	Yes
		2007 – Puerto Rico and Island Areas	No	Yes
		2012 – United States	No	Yes
		2012 – Puerto Rico and Island Areas	No	Yes
Vehicle Inventory Use Survey	Every 5 years	2007 – United States	No	Yes
		2012 – United States	No	Yes
Commodity Flow Survey	Every 5 Years	2007 – United States	No	Yes
		2012 – United States	No	Yes
Nonemployer Statistics	Annual	2002 – 2016: United States	No	Yes
Survey of Business Owners	Annual	2002 – 2016: United States	No	Yes
Business Expenditure Survey	Annual	2006 – 2016: United States	No	Yes
Annual Survey of Manufactures	Annual	2003 – 2016: United States	No	Yes
County Business Patterns	Annual	2004 - 2016: United States	No	Yes

#### 2.2.4 Communications Directorate

The Communications Directorate is responsible for official news releases, press releases and other notifications of product and data releases and responding to and providing services for the media. The directorate also serves as the official liaison to the Congress and in that capacity sponsors a dedicated web site to disseminate data and products from the Census Bureau. This site is built and maintained by the DADS Program and can be found at <http://factfinder.census.gov>.

### 2.3 Suite of Systems

Table 2-4, the DADS Suite of Systems, lists the inter-related systems that provide the automated capabilities required to support data tabulation and dissemination business operations.

The DADS II contract represents the opportunity to modernize these systems and extend the capabilities to tabulate and disseminate current and projected data products.

**Table 2-4. DADS Suite of Systems**

<b>System</b>	<b>Description</b>	<b>Tabulation</b>	<b>Dissemination</b>
American FactFinder (AFF)	<ul style="list-style-type: none"> <li>• Online system that enables access to pre-packaged data products and user-selected data tables and maps</li> <li>• Web-based application with Oracle data warehouse, Java code, and Websphere Application Server</li> <li>• The system includes:               <ul style="list-style-type: none"> <li>❖ American FactFinder: <a href="http://factfinder.census.gov/home/saff/main.html?_lang=en">http://factfinder.census.gov/home/saff/main.html?_lang=en</a></li> <li>❖ FastFacts for Congress: <a href="http://fastfacts.census.gov/home/cws/main.html">http://fastfacts.census.gov/home/cws/main.html</a></li> <li>❖ American Indian and Alaskan Native Data and Links site: <a href="http://factfinder.census.gov/home/aian/index.html">http://factfinder.census.gov/home/aian/index.html</a></li> </ul> </li> </ul>	No	Yes
Advanced Query (AQ)	<ul style="list-style-type: none"> <li>• Online system that enables ad hoc queries on microdata, subject to Census policies on access and confidentiality</li> <li>• Web-based application comprised of a DB2 database and an application based on the commercial, off-the-shelf (COTS) product, MicroStrategy 7.0</li> <li>• User name and password protected</li> </ul>	Yes	Yes
Data Product Production (DPP) System	<ul style="list-style-type: none"> <li>• Primary Census tabulation system</li> <li>• Tabulate Decennial data (100% and Sample data)</li> <li>• Large-scale system comprised of SuperSTAR software and database with custom code using SAS and UNIX shell scripts</li> </ul>	Yes	No
Virtual Table Generator (VTG)	<ul style="list-style-type: none"> <li>• Translates product specifications into AFF compatible metadata</li> </ul>	No	Yes
Fenestra Printed Report Generator	<ul style="list-style-type: none"> <li>• Tool by which data outputs were created as inputs to pdf printed reports</li> </ul>	No	Yes (inactive)

### 3. PRODUCT DELIVERABLES

The DADS Program deliverables are divided into tabulation and dissemination deliverables. They are further grouped by census or survey. Refer to Appendices H and I respectively for a list of tabulation and dissemination deliverables. These deliverables reflect the current understanding of the DADS Program requirements and are subject to change based on evolving program needs.

#### 3.1 Generic Product Types

Each Directorate specifies a particular mix of product types and formats for the dissemination of the results of a given census or survey. These program areas follow well-established practices and procedures for the design, specification, and presentation of the results. Results are presented in some combination of generic product types, including data files, tables, maps, analytical reports, metadata, and documentation, as shown in Table 3-1.

**Table 3-1. Generic Product Types**

Type	Description
Fixed Format, Static Products	<ul style="list-style-type: none"> <li>Examples include: <ul style="list-style-type: none"> <li>Published reports containing narrative description with supporting tables, maps and charts on a particular topic</li> <li>FTP files available for download</li> <li>Data files on CD-ROM/DVD for purchase</li> </ul> </li> <li>May appear in both print and electronic media</li> </ul>
Data Elements	<ul style="list-style-type: none"> <li>Individual, data characteristics such as total population, income, age, sales, number of employees, housing starts, etc.</li> <li>Usually presented in tabular or map format</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>Provides information to clarify data definitions and use</li> <li>Includes information on data collection instruments, data processing procedures, and data accuracy</li> <li>Includes meaning of terms and concepts, and interpretation of coding schemes</li> <li>Includes training materials and system help</li> <li>Published in electronic form</li> </ul>
Metadata	<ul style="list-style-type: none"> <li>Structured and stored as data</li> <li>Provides information about underlying data</li> </ul>
Tables	<ul style="list-style-type: none"> <li>Collections of data systematically arranged in tabular form with appropriate titles, headers, and labels</li> <li>Generally designed for viewing</li> <li>Content, structure, and format defined by subject matter experts</li> <li>Two levels of aggregation: <ul style="list-style-type: none"> <li>Base tables and detailed tables are highly detailed and are grouped together to create summary files</li> <li>Derived tables are constructed from base tables to further aggregate or modify data presentations. Examples include: <ul style="list-style-type: none"> <li>Tabular Profiles/Comparison Profiles</li> <li>Quick Tables/Subject Tables</li> <li>Geographic Comparison Tables</li> </ul> </li> </ul> </li> </ul>
Maps	<ul style="list-style-type: none"> <li>Reference maps graphically describe geographic bounds used in tabulation</li> <li>Thematic maps (e.g., multi-colored choropleth maps) help users visualize geographic patterns in data</li> <li>Both map types include orienting features (e.g., roads, water bodies, and geographic boundaries)</li> </ul>
Data Files	<ul style="list-style-type: none"> <li>Collections of data elements designed for computer manipulation</li> <li>May consist of public use microdata samples or aggregated data</li> <li>In aggregated data files, data elements may be grouped into base table presentations</li> <li>Accompanied by extensive documentation or metadata</li> <li>Examples include, Census 2000 Summary File and Economy-Wide Key Statistics files</li> </ul>

### 3.2 Tabulation Data Product Descriptions

The DADS Program is responsible for delivering several products associated with data tabulation. The list of major tabulation product deliverables is presented in Appendix H.



### 3.2.1 Decennial Directorate

#### 3.2.1.1 2010 Decennial Census Tabulation Products

Data products for the 2010 Decennial Census and the 2008 Dress Rehearsal are not yet defined but are likely to consist of typical summary file tabulations as done for prior censuses. The 2010, data products will be produced from data collected from questions asked of all persons and households referred to as the “hundred percent” data. Hundred percent data characteristics include basic demographic data such as age, race, sex, and relationship. The final decision on the hundred percent data characteristics for the 2010 Decennial Census will be decided by subject matter areas of the Census Bureau.

Below is a brief description of the typical summary file tabulations produced for the Census 2000 as an example of what may be requested for 2010. These products were referred to as Summary File 1 and Summary File 2 for Census 2000. This document references the products in the same manner for 2010 because official product names have not been established. For 2010, a Public Use Microdata Sample (PUMS) File product may also be created; in the past, this product has not been created by the DADS Program.

#### Summary Files 1 and 2 – Hundred Percent

Summary File 1 provides data for a limited number of race groups for all geographic areas in the United States down to the block level. Summary File 2 iterates these same data characteristics for detailed population groups such as Japanese, Dominican, and Cherokee. Inclusion of a population group is based on a population threshold. Summary File 2 provides less geographic detail than Summary File 1. The lowest level of geography in Summary File 2 is the census tract.

In the past, these data products were tabulated in three phases:

1. State based geographies such as states, counties and cities
2. National level geographies whose boundaries were defined as of Census Day such as Metropolitan Statistical Areas and Congressional Districts
3. Additional urban and rural geographies whose boundaries were defined based on Census 2000 results

For 2010, geographic coverage will include the United States, (50 states and the District of Columbia), and Puerto Rico. These products provide the most geographically detailed results from the Decennial Census with data being provided to the block level except as noted in Summary File 2.

#### Public Use Microdata Sample (PUMS) Files

These files contain records for a sample of housing units with information on the characteristics of each housing unit and its residents. Geographic and person level identifiers are removed to preserve respondent confidentiality. These microdata files permit users with special research and analysis needs to prepare custom tabulations.

### **3.2.1.2 2010 Island Area Census Data Products**

Data products for the 2010 Island Area Census are not yet defined but are likely to consist of typical summary file tabulations as done for prior censuses. Data characteristics collected and tabulated for each Island Area may vary based on local needs but will include the basic demographic characteristics and more detailed characteristics such as citizenship, journey to work, disability status, educational attainment and more. The final decision on the data characteristics for the 2010 Island Area Census will be decided by subject matter areas of the Census Bureau.

In 2000, a separate summary file was tabulated for each Island Area; we expect a similar approach for 2010 and have used the Census 2000 data product naming convention in this document because official product names have not been decided. For 2010, a Public Use Microdata Sample (PUMS) File product may also be released. In the past, the Island Area data products were not tabulated by the DADS Program.

Geographic coverage includes American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands. Data products for each Island Area are tabulated separately.

### **3.2.1.3 Redistricting Data Office (RDO) Tabulation Products**

The Redistricting Data Office requires products from each Decennial Census to fulfill the legal mandate of Public Law 94-171 to provide data to the states for legislative redistricting. Additionally, the RDO provides data products to Congress for newly drawn Congressional Districts after each Decennial Census and biannually through the decade if Congressional District boundaries change.

#### Census Redistricting Data (Public Law 94-171)

The Census Redistricting Data fulfills the mandate of Public Law 94-171 to provide state legislatures with small-area census population totals for legislative redistricting. Data products for this release are defined, tabulated and released at the specific direction of the Redistricting Data Office. Tabulations are based on the hundred percent data characteristics described in 3.2.1.1. For 2000, a summary file was tabulated; for 2010 we expect a similar approach.

Geographic coverage is limited to the United States (the 50 states and the District of Columbia) and Puerto Rico. Data are tabulated one time as a complete set.

#### Congressional District Data

Congressional District data products based on the 2010 Census results are not yet defined. Data products for this release are defined, tabulated and released at the specific direction of the Redistricting Data Office. Tabulations are based on the hundred percent data characteristics described in 3.2.1.1. For 2000, a summary file was tabulated; for 2010 we expect a similar approach and the DADS Program will tabulate the hundred percent component of the Congressional District Data.

In 2000, an additional summary file tabulation was created from the detailed characteristics referred to as the “sample” component of the Census 2000. The detailed data characteristics include citizenship, journey to work, disability status, educational attainment, income and more. For 2010, the DADS Program will not tabulate the sample component of the Congressional District Data Products.

Geographic coverage is limited to the United States United States (the 50 states and the District of Columbia) and Puerto Rico. Data are tabulated one time as a complete set.

### **3.3 Dissemination Data Product Descriptions**

The descriptions below provide an overview of the major census and survey products listed in Appendix I. Each brief overview identifies the mix of product types to be disseminated, the preferred release flow, any special requirements such as dual language, and an indication of the geographic coverage and complexity.

Appendix I specifies the list of individual product releases according to the release cycle and schedule required by the data providers. Unknown release dates are denoted as “to be determined” (TBD). For definitions and examples of detailed product formats (e.g., quick tables, base tables, etc.) referenced in this section, see Appendix F: Dissemination Object Descriptions.

Dissemination operations require that data products be available in an internal review environment prior to public release. This allows each data provider time to review the data, the product formats and layout, and the geographic content for accuracy, quality, and completeness. Corrections and redeliveries are often made during this review period to finalize and approve the data products for public release. The timing and delivery of products to the internal environment, the extent of the review and revision cycle, and the method of subsequent public release are negotiated with each program area by the DADS Program.

#### **3.3.1 Decennial Directorate**

The Decennial Directorate sponsors dissemination of the Decennial Census, Island Area Censuses, American Community Survey, and Puerto Rico Community Survey data products.

##### **3.3.1.1 2010 Decennial Census Data Products**

Data products for the 2010 Decennial Census and the 2008 Dress Rehearsal are not yet defined but are likely to consist of some combination of standard data presentation formats such as detailed tables, quick tables, geographic comparison tables, thematic maps, reference maps, and printed reports. These presentation formats were grouped as data files and referred to as Summary File 1 and Summary File 2 for the Census 2000; they will be referenced the same way for 2010 until specific data file (product names) are determined. For 2010, a Public Use Microdata Sample (PUMS) File product may also be released.

In the past, these data products were released in three phases:

1. State based geographies such as states, counties and cities in groups of states over a period of time.

2. National level geographies whose boundaries were defined as of Census Day such as Metropolitan Statistical Areas and Congressional Districts; a one-time update to the summary file was made to add these geographic areas.
3. Additional urban and rural geographies whose boundaries were defined based on Census 2000 results; a final update was made to the respective summary files to add these additional geographic areas.

The DADS Program assembled all of the geographic areas released in each phase into one complete summary file, with a single point of access on-line via Internet.

For 2010, geographic coverage will include the United States, (50 states and the District of Columbia), and Puerto Rico. These products provide the most geographically detailed results from the Decennial Census with data being provided to the block level except as noted in Summary File 2.

#### Public Use Microdata Sample (PUMS) File

These files contain records for a sample of housing units with information on the characteristics of each unit and each person in it. While preserving confidentiality (by removing identifiers), these microdata files permit users with special data needs to prepare virtually any tabulation.

#### **3.3.1.2 2010 Island Area Census Data Products**

Data products for Island Areas are not yet defined but will consist of some combination of standard data presentation formats such as detailed tables, quick tables, geographic comparison tables, reference maps, associated metadata and technical documentation, and printed reports. While the product types for the Island Areas will be similar, the data content will differ among the Island Areas. For 2010, a Public Use Microdata Sample (PUMS) File product may also be released.

Geographic coverage includes American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands. Data products for each Island Area are released separately.

#### **3.3.1.3 Redistricting Data Office Data Products**

The Redistricting Data Office requires products from each Decennial Census to fulfill legal mandates to provide data to the states for legislative redistricting, and to provide data to Congress for their newly drawn Congressional Districts.

#### Census Redistricting Data (Public Law 94-171)

The Census Redistricting Data fulfills the mandate of Public Law 94-171 to provide state legislatures with small-area census population totals for legislative redistricting. Data products and the timing of their release are specified by the Redistricting Data Office. The data products for the 2010 Decennial Census redistricting cycle are not yet defined but are likely to consist of some combination of standard data presentation formats such as detailed tables, quick tables, geographic comparison tables, thematic maps, reference maps, and associated metadata and technical documentation.

Geographic coverage is limited to the United States, (50 states and the District of Columbia), and Puerto Rico. Data are released one time as a complete set.

#### Congressional District Data

Congressional District data products based on the 2010 Decennial Census results are not yet defined but are likely to consist of some combination of standard data presentation formats such as detailed tables, quick tables, geographic comparison tables, thematic maps, reference maps, and associated metadata and technical documentation.

After redistricting occurs, census data are tabulated for the new Congressional Districts within each state. Thereafter, for each new Congress seated every 2 years, there is the potential that one or more states may change their Congressional District boundaries. When this occurs, the most recent census data are disseminated for the newly defined Congressional District boundaries. The data product releases are timed for the seating of each new Congress in the January following the election.

Geographic coverage is limited to the United States, (50 states and the District of Columbia), and Puerto Rico. Data are released one time as a complete set.

#### **3.3.1.4 American Community Survey Data Products**




Data products for the American Community Survey (ACS) include base tables, narrative profiles, comparison profiles (multi-year profiles), ranking tables, subject tables, selected population profiles (iterated and non-iterated), thematic maps, reference maps, PUMS, quality measures, and associated metadata and technical documentation.

Prior to 2005, the ACS has been in a test and demonstration phase in order to refine and develop survey methodologies, evaluate and analyze results, and finalize product presentation formats. During this time, the ACS geographic coverage and survey sample was limited. In 2005, the ACS expanded to full sample. The ACS will release data for geographies with populations of 65,000 or more annually beginning in summer 2006. For smaller geographies, it will take three or five years, depending on their population size, to accumulate a large enough sample to produce releasable estimates. Once those data are collected, the Census Bureau will release tabulations annually based on three-year period data for geographies with populations between 20,000 and 65,000, and five-year period data for geographies as small as census tracts (see timeline and additional materials at <http://www.census.gov/acs/www>).

Figure 3-1, summarizes the ACS release schedule. In 2006, the first set of single-year estimates are released for geographies with 65,000 and greater populations. These geographies will continue to receive single-year estimates annually. Beginning in 2008, data collected over a 3-year period (2005-2007) will be released for geographies with a population of at least 20,000. A new 3-year product will be released in 2009 based on data collected in 2006-2008.

In 2010 the first 5-year product will be released based on data collected in 2005-2009. The 5-year products are produced for geographies down to census tracts and block groups. Once 3-year or 5-year products are produced, annual updates will follow. Each of the products contains many components that are released in several “waves” throughout the calendar year.

**Figure 3-1. ACS Data Release Schedule**

Type of Data	Population Size of Area	Data For The Previous Year or Combination of Years Would be Released In The Summer Of:							
		2006	2007	2008	2009	2010	2011	2012	
Single-year estimates	65,000+								
3-year estimates	20,000+								
5-year estimates	Down to Census Tract and Block Group								

### 3.3.1.5 Puerto Rico Community Survey Data Products

Data products for the Puerto Rico Community Survey will be similar to those of the ACS and include base tables, narrative profiles, comparison profiles (multi-year profiles), ranking tables, subject tables, selected population profiles (iterated and non-iterated), thematic maps, reference maps, PUMS, quality measures, and associated metadata and technical documentation.

Annual, 3-year, and 5-year estimates will be released; all products will be released in both Spanish and English.

Timing of both the Spanish and English release relative to the ACS are yet to be determined; however, the Spanish release may lag the English release to allow time to translate products.

Geographic coverage is limited to Puerto Rico.

### 3.3.2 Demographic Directorate

The Demographic directorate provides population estimates data products.

#### 3.3.2.1 Population Estimates Data Products

Data products for the Population Estimates include Detailed Tables, Geographic Comparison Tables, Thematic Maps and Reference Maps.

A subset of data items from the Population Estimates program is released on AFF in multiple phases of increasing geographic detail. Four phases of release are supported for a given year:

1. A release for the United States, Regions, Divisions and States;
2. A release for Counties;
3. A release for Cities, Towns and County Subdivisions; and

#### 4. A release for Metropolitan and Micropolitan Statistical Areas.

The primary dissemination channel is the Population Division's own web site (<http://www.census.gov/popest/estimates.php>), with AFF acting as a secondary dissemination channel for selected data items. The public release of the estimates on AFF is always after the public release on the Population Division web site. Public release by the DADS Program is within five business days of the release on the Population Division's web site.

### 3.3.3 Economic Directorate

The Economic directorate provides quinquennial economic census data products, annual economic survey data products, and monthly economic indicators.

#### 3.3.3.1 Quinquennial Economic Census Data Products

For each Economic Census, the data products are comprised of results from multiple censuses and surveys:

- Economic Census of the United States
- Economic Census of Island Areas
- Nonemployer Statistics (NES)
- Survey of Business Owners (SBO)
- Vehicle Inventory Use Survey (VIUS)
- Commodity Flow Survey (CFS)

Data products include detailed sector-specific data files, economy-wide data files, Industry Quick Reports, Geography Quick Reports, Product Quick Reports, Thematic Maps, Reference Maps, printed products and FTP files.

These data products are released in an on-demand flow over approximately a two-year period as data for specific industries and geographic areas are tabulated and approved.

#### 3.3.3.2 Annual Economic Surveys Data Products

##### County Business Patterns Survey

Data products for the County Business Patterns Survey are likely to include or be similar to economy-wide data files, Geographic Quick Reports, Thematic Maps and Reference Maps. A single release cycle is expected for a given year.

##### Nonemployer Statistics

Data products for the Nonemployer Statistics (NES) will likely include economy-wide data files and Reference Maps only. A single release cycle is expected for a given year. In years ending in two and seven, the NES is published as part of the results of the Economic Census.

##### Annual Survey of Manufactures

Data products for the Annual Survey of Manufactures are likely to remain limited to data file support. These data products are released in two cycles, with Nation-only data files released first, followed by data files containing Nation and State data.

### 3.3.3.3 Monthly Economic Indicator

In the near future, the DADS Program will begin to support the release of a monthly Economic Indicator. Requirements for this effort are currently being defined.

## 4. SPECIFIC REQUIREMENTS

Program level requirements were compiled from reviews of current system documentation and discussions with Census Bureau stakeholders. The requirements are consistent with the DADS Program goals and objectives (see Table 1-1 above). The requirements are documented in the RTMs and associated artifacts (see Appendices A to G), and are traceable throughout the system life cycle.

Each of the requirements in the respective tabulation and dissemination RTMs is listed as a separate record in the DADS Requirements Database. The database is currently maintained by the Government using DOORS, and will be used by the Contractor to manage system requirements and maintain requirements traceability throughout the system life cycle. The database fields are presented in Table 4-1.

**Table 4-1. Requirements Database Fields**

RTM Field	Description
ID	Unique identifier for each requirement
Service	Either tabulation or dissemination
Type	Includes types highlighted in Section 3.1 (Table 3-1)
Statement	Actual statement beginning with “The system shall ... “
Source Document	Original source document from which the requirement originated
Stakeholder	Organization (e.g., DSCMO, ACSO) that originated the requirement
Related Requirement	Other requirements that may be related
Supplemental Information	Additional information that may be pertinent to the requirement

The requirements are grouped into mutually exclusive categories as presented in Table 4-2.

**Table 4-2. Requirements Categories**

Category	Description
External Interfaces	Interfaces to external systems such as the FTP server
User Needs	Describes user needs
Functional	Describes functional requirements
Legal Standards	Includes Title 13, Section 508
Internal Standards	Describes internal Census Bureau standards such as confidentiality and privacy



Performance and Quality	Includes performance requirements such as responsiveness, availability, and reliability. Also includes quality requirements
Systems Engineering and Security	Describes engineering requirements (e.g., architecture) Describes security requirements
Data Content	Describes data format and content requirements
Operational	Describes operational requirements (e.g., day-to-day usage)

## 5. REQUIREMENTS TRACEABILITY

The Contractor shall be responsible for managing system requirements and maintaining backward and forward traceability throughout the systems life cycle. The database shall be used to manage the evolution of system requirements and to track the satisfaction of the requirements using appropriate release and version control procedures.

### 5.1 Backward Traceability

The requirements documented in the RTMs and the database are traceable back to the DADS goals and objectives. This backward traceability is shown in Table 5-1.

**Table 5-1. Traceability to Goals and Objectives**

Goals	Objectives	Requirements
1. Maximize the efficiency, timeliness and accuracy of the tabulation and dissemination processes	1.1 Meet all legal deadlines and external commitments	To include references from RTMs and associated artifacts in the final RFP.
	1.2 Contribute to the overall improvement of the quality and accuracy of the data and data products	
	1.3 Reduce the time required to produce releasable data and products	
	1.4 Simplify and standardize the processes for tabulation and dissemination	
	1.5 Maintain or improve business continuity of tabulation and dissemination operations in a changing environment	
2. Minimize the cost of tabulation and dissemination	2.1 Implement process improvement initiatives to drive down the cost of tabulation and dissemination	
	2.2 Collaborate with other Census Bureau organizations that perform tabulation and dissemination in order to reduce cost	
	2.3 Leverage existing investments, processes and systems within the Census Bureau	

Goals	Objectives	Requirements
3. Enhance end-user satisfaction with tabulation and dissemination products and services	3.1 Ensure management and control of data privacy and confidentiality	
	3.2 Maintain high system availability	
	3.3 Increase user satisfaction with their ability to find and acquire Bureau of Census data and data products	
	3.4 Increase user satisfaction with the usefulness and relevance of Bureau of Census data and data products	
	3.5 Develop new, more useful data products and services using existing Bureau of Census data.	
	3.6 Strengthen the effectiveness of secondary distributors of Bureau of Census data and data products	

## 5.2 Forward Traceability

The requirements in the RTMs and database must also be traceable throughout the system life cycle. All subsequent life cycle deliverables that are based on the requirements must show traceability to the RTMs.

## Appendix A. Tabulation Action/Object Matrix

### See Excel spreadsheet “Tabulation Action-Object Matrix”

The purpose of the matrix is to provide a high-level view of the system functions. This matrix is provided as a separate file in the bidder’s library.

Instructions for reading the matrix:

Columns represent system objects.

- In general, the objects are classified as either inputs or outputs of the system.
- Detailed definitions are provided in Appendix C: Tabulation Object descriptions.

Rows represent system actions.

- The x’s represent the application of an action to a specific object.
- Each row is written as a requirements statement in Appendix B: Tabulation Requirements Statements.
- The row requirement number corresponds to the requirements statement in Appendix B.
- Additional, general requirements beyond system functions are included in Appendix B.

## Appendix B: Tabulation Functional Requirements

This list of stated requirements represents the final version of the DADS tabulation requirements, based on the analysis of the Action/Object Relationship matrix in Appendix A, the detailed descriptions of actions and objects in Appendix C, and additional requirements that pertain to the overall functionality of the tabulation process.

1. The system shall perform extract, transform and load operations for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Product Content Specifications (General)
  - f. Product Tabular Specifications
  - g. Product Characteristic Iteration Specifications
  - h. Product Geographic Levels for Aggregation
  - i. Validation Specifications
  - j. Verification Files

Extract, transform, and load geographic, demographic and verification data and specification metadata.

2. The system shall perform data linkage for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data

Combine geographic, housing, and population data based on their relationships for use in the tabulation process.

3. The system shall perform automated data verification on
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata

Examine data for format, content, completeness and structural integrity.

4. The system shall generate exceptions lists for
  - a. Product Content Specifications (General)
  - b. Product Tabular Specifications
  - c. Product Characteristic Iteration Specifications
  - d. Product Geographic Levels for Aggregation
  - e. Validation Specifications

Compare updates to specifications for product content and tabulation definitions to resolve discrepancies and updates.

5. The system shall create recodes for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata

Create new categorizations of values defined for a characteristic; create new fields based on the combined values of existing characteristics; create metadata corresponding to these recodes.

6. The system shall create inputs for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Product Content Specifications (General)
  - f. Product Tabular Specifications
  - g. Product Characteristic Iteration Specifications
  - h. Product Geographic Levels for Aggregation
  - i. Validation Specifications
  - j. Verification Files

Create new or additional microdata, specifications, and verification files.

7. The system shall display inputs for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Product Content Specifications (General)
  - f. Product Tabular Specifications
  - g. Product Characteristic Iteration Specifications
  - h. Product Geographic Levels for Aggregation
  - i. Validation Specifications
  - j. Verification Files

Display the metadata for the components of each product; display unit records and verification data.

8. The system shall modify inputs for
  - a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata

- e. Product Content Specifications (General)
- f. Product Tabular Specifications
- g. Product Characteristic Iteration Specifications
- h. Product Geographic Levels for Aggregation
- i. Validation Specifications
- j. Verification Files

Modify the metadata for the components of each product; modify unit records and verification data.

9. The system shall delete inputs for
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Product Content Specifications (General)
  - f. Product Tabular Specifications
  - g. Product Characteristic Iteration Specifications
  - h. Product Geographic Levels for Aggregation
  - i. Validation Specifications
  - j. Verification Files

Delete the metadata for the components of each product; delete unit records and verification data.

10. The system shall perform iterative ad hoc data tabulations using inputs to create reports
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Reports

Create cross-tabulations of record level data for a table based on metadata instructions/constraints; iterate these tabulations across multiple geographies, characteristics, etc.

11. The system shall allow the user to filter input and output data for
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Summarized Data

Allow user to selectively restrict or eliminate certain characteristics from the summarization process.

12. The system shall allow the user to save input and output data for

- a. Record Level Data (Microdata)
- b. Record Level Supplemental Data
- c. Geographic Data
- d. Metadata
- e. Summarized Data

Allow user to electronically save input and output data.

13. The system shall allow the user to export input and output data for
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Summarized Data

Allow user to export input and output data.

14. The system shall allow the user to print input and output data for
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Summarized Data

Allow user to print input and output data.

15. The system shall allow the user to select input data for
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata

Allow user to interactively select input data for tabulation.

16. The system shall allow the user to obtain tabulations on demand using
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Metadata
  - e. Summarized Data

Allow users to interactively produce tabulations on demand.

17. The system shall perform iterative data tabulation on
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data

- c. Geographic Data
- d. Metadata
- e. Product Content Specifications (General)
- f. Product Tabular Specifications
- g. Product Characteristic Iteration Specifications
- h. Product Geographic Levels for Aggregation
- i. Validation Specifications

The system shall perform batch mode iterative data tabulation

18. The system shall verify the data accuracy using inputs and outputs
- a. Verification Specifications
  - b. Verification Files
  - c. Summarized Data

Verify the results of the cross tabulation counts.

19. The system shall perform data matching consistency checks on
- a. Validation Specifications
  - b. Verification Files
  - c. Summarized Data

Perform automated data verification.

20. The system shall create derived measures from
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Summarized Data

Apply standard or Census Bureau specified measures.

21. The system shall apply Census Bureau rounding rules to
- a. Summarized Data

Round tabulated data according to rules set forth by the Census Bureau

22. The system shall verify application of rounding rules
- a. Summarized Data
  - b. Final Product

Verify that the application of rounding has appropriately changed the values of the counts in accordance with the Census Bureau rounding rules to produce final products.

23. The system shall apply Census Bureau disclosure rules to
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data



- c. Geographic Data
- d. Summarized Data

Apply rules for query composition, query result inspection, and release that are specified by the Census Bureau.

24. The system shall verify the application of disclosure rules to
- a. Record Level Data (Microdata)
  - b. Record Level Supplemental Data
  - c. Geographic Data
  - d. Summarized Data

Verify that the composition and release of data is in accordance with the Census Bureau disclosure rules.

25. The system shall enable file transfers of final products to external systems.
- a. Final Product

Provide file transfer capability to allow for the movement of files directly to another server.

26. The system shall output technical information on
- a. Final Products

Generate product metadata in a format for handoff to various final media outlets for delivery to end users, to aid in the creation of product documentation.

25. The system shall generate
- a. Final Products
  - b. Reports

Generate reports for each process in the data production system.

## Appendix C (1&2): Tabulation Descriptions

Appendix C1: Tabulation Objects				
Object Name	Object Type	Provider	Recipient	Description
<b>Input</b>				
Record Level Data	Microdata	Census or Survey Divisions	DADS	Record level data includes block level geographic collection data, person data, household data, and group quarters data
Record Level Supplemental Data	Microdata	Census or Survey Divisions	DADS	Additional microdata fields that are derived from the response microdata
Geographic Data	Block Tabulation Geography	Geography Division	DADS	Block tabulation geography to match the geo-coding in the record level data so that accurate tabulation at various geographic levels can be performed
Metadata	Metadata	Census or Survey Divisions	DADS	Geographic, person, and housing characteristic codes, descriptions, limits, and values for microdata and accuracy statements and subject definitions for products
Product Content Specifications (General)	Metadata	Subject Matter Expert Divisions	DADS	A high level description of the products, product parts, and content for census or survey product creation
Product Tabular Specifications	Metadata	Subject Matter Expert Divisions, DADS	DADS	<ul style="list-style-type: none"> <li>• Table layouts and sourcing information</li> <li>• Table title and stub definitions</li> <li>• Derived measure specifications</li> <li>• Disclosure avoidance rules</li> <li>• Rounding rules</li> <li>• Thresholds</li> <li>• Derived measure specifications</li> </ul>
Product Characteristic Iteration Specifications	Metadata	Subject Matter Expert Divisions	DADS	Particular values of demographic characteristics to use for iteration of tabulations within defined products

## Appendix C1: Tabulation Objects

Object Name	Object Type	Provider	Recipient	Description
<b>Input</b>				
Product Geographic Levels for Aggregation	Metadata	Subject Matter Expert Divisions	DADS	Geographic specifications that provide definitions of the political and statistical entities that will be used for aggregation in the tabulation of the record level data
Verification Specifications	Specification	Subject Matter Expert Divisions, Survey Divisions, DADS	DADS	Consistency matching criteria on which to base tabulation verification within and between products
Verification Files	Related data provided within and outside of DADS	Subject Matter Expert Divisions, Survey Divisions, DADS	DADS	Tabulation data and counts from other sources that will be used to validate the results of production tabulations
<b>Output</b>				
Summarized Data	Data that has been tabulated to specific geographic levels	DADS	DADS	Tabulation provides counts of the existence of certain characteristics. These counts are summarized for unique geographic areas. Each product definition contains a list of geographic types or “levels” required for summarization.
Final Product	All tabulated and summarized data merged into one product	DADS	DADS	Products are combinations of a fixed set of one or more unique tabulations that are summarized to predefined geographic levels for the U.S, the fifty states, the District of Columbia, Puerto Rico, and the Island areas.
Reports	Information about system status and program output	DADS	DADS	System status reports, application reports, inventory reports, and other reports generated by system activities

## Appendix C2: Tabulation Actions

Pre-Tabulation				
Req. #	Actor	Action	Objects Involved in this Action	Action Description
1	System	Perform ETL	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Product Content Specifications (General)</li> <li>f. Product Tabular Specifications</li> <li>g. Product Characteristic Iteration Specifications</li> <li>h. Product Geographic Levels for Aggregation</li> <li>I. Validation Specifications</li> <li>j. Verification Files</li> </ul>	Extract data from delivery format, transform it to the desired format, and load the system repository
2	System	Perform data linkage	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> </ul>	Combine and logically relate geographic, housing, and population data based on their relationships and dependencies
3	System	Perform automated data verification	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> </ul>	Examine data for format, content, valid values, completeness, and structural integrity
4	System	Generate exception list for comparison of specifications	<ul style="list-style-type: none"> <li>a. Product Content Specifications (General)</li> <li>b. Product Tabular Specifications</li> <li>c. Product Characteristic Iteration Specifications</li> </ul>	Compare specifications from current and previous versions of product content and tabulation definitions to verify updates

			<ul style="list-style-type: none"> <li>d. Product Geographic Levels for Aggregation</li> <li>e. Validation Specifications</li> </ul>	
5	User	Create recodes	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> </ul>	Create new categorizations of values defined for a characteristic and/or create new fields based on the combined values of existing fields
6	User	Create inputs	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>Metadata</li> <li>d. Metadata Product</li> <li>e. Content Specifications (General)</li> <li>f. Product Tabular Specifications</li> <li>g. Product Characteristic Iteration Specifications</li> <li>h. Product Geographic Levels for Aggregation</li> <li>7. i. Validation Specifications</li> <li>8. j. Verification Files</li> </ul>	Allow user to create alternative versions of the input metadata, microdata, specifications, and verification files
7	User	Display inputs	<ul style="list-style-type: none"> <li>j. Verification Files</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Product Content Specifications (General)</li> <li>f. Product Tabular Specifications</li> <li>g. Product Characteristic Iteration Specifications</li> </ul>	Allow user to display all versions of input metadata, microdata, verification data and specifications

			<ul style="list-style-type: none"> <li>h. Product Geographic Levels for Aggregation</li> <li>i. Validation Specifications</li> <li>j. Verification Files</li> </ul>	
8	User	Modify inputs	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Product Content Specifications (General)</li> <li>f. Product Tabular Specifications</li> <li>g. Product Characteristic Iteration Specifications</li> <li>h. Product Geographic Levels for Aggregation</li> <li>i. Validation Specifications</li> <li>j. Verification Files</li> </ul>	Allow user to modify all versions of input metadata, specifications, and data
9	User	Delete inputs	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Product Content Specifications (General)</li> <li>f. Product Tabular Specifications</li> <li>g. Product Characteristic Iteration Specifications</li> <li>h. Product Geographic Levels for Aggregation</li> <li>i. Validation Specifications</li> <li>j. Verification Files</li> </ul>	Allow user to delete all versions of input metadata, specifications, and data

Ad Hoc Tabulation				
10	User	Perform iterative ad hoc data tabulation	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Summarized Data</li> </ul>	Interactively create tabulations and summarizations based on geographic and demographic characteristics using a tool to specify components and receive final data
11	User	Allow user to filter input and output data	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Summarized Data</li> </ul>	Allow the user to establish criteria for reducing the number of unit records contributing to a tabulation, to reduce the number of result categories associated with a field, and to specify data filters
12	User	Allow user to save input and output data	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Summarized Data</li> </ul>	Allow the user to save the tabulation specification and the results of the tabulated data
13	User	Allow user to export input and output data	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Summarized Data</li> </ul>	Allow users to export the tabulation specification and the results of the tabulated data
14	User	Allow user to print input and output data	<ul style="list-style-type: none"> <li>a. Record Level Data (Microdata)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> <li>d. Metadata</li> <li>e. Summarized Data</li> </ul>	Allow users to print the tabulation specification and the results of the tabulated data
15	User	Allow user to select tabulation criteria	<ul style="list-style-type: none"> <li>a. Record Level Data (Micro data)</li> <li>b. Record Level Supplemental Data</li> <li>c. Geographic Data</li> </ul>	Allow users to interactively select demographic and geographic data for the tabulation and

			d. Metadata	summarization of record level data
16	User	Allow user to obtain tabulations on demand	a. Record Level Data (Micro data) b. Record Level Supplemental Data c. Geographic Data d. Metadata e. Summarized data	Allow users to perform processing “on demand”
Batch Tabulation				
17	System	Perform iterative data tabulation	a. Record Level Data (Microdata) b. Record Level Supplemental Data c. Geographic Data d. Metadata e. Product Content Specifications (General) f. Product Tabular Specifications g. Product Characteristic Iteration Specifications h. Product Geographic Levels for Aggregation	Create cross-tabulations of record level data for a table based on metadata instructions and constraints and iterate these tabulations across multiple geographies, characteristics, etc.
18	System	Verify data accuracy	a. Validation Specifications b. Verification Files c. Summarized Data	Provide system generated verification of tabulated data using verification data from other sources
Post Tabulation				
19	System	Perform data matching consistency check	a. Validation Specifications b. Verification Files c. Summarized Data	Perform automated data verification via internal data matching within a product, data matching to previously released products, and data matching to other independent sources of data



20	System	Create derived measures	a. Record Level Data (Micro data) b. Record Level Supplemental Data c. Summarized Data	Apply standard or Census Bureau specified logic to compute measures not already contained in the tabulations or product which are derived from the tabulated data, such as means, linear medians, Pareto medians, ratios, etc.
21	System	Apply BOC rounding rules	a. Summarized Data	Round tabulated data according to rules set forth by the Census Bureau
22	System	Verify application of BOC rounding rules	a. Summarized Data b. Final Product	Verify that the application of rounding has appropriately changed the values of the counts in accordance with the Census Bureau rounding rules
23	System	Apply BOC disclosure rules	a. Record Level Data (Microdata) b. Record Level Supplemental Data c. Geographic Data d. Summarized Data	Apply rules for tabulation composition and summarization result inspection that are specified by the Census Bureau
24	System	Verify application of BOC disclosure rules	a. Record Level Data (Microdata) b. Record Level Supplemental Data c. Geographic Data d. Summarized Data e. Final Product	Verify that the composition and release of data is in accordance with the Census Bureau disclosure rules
25	System	Enable file transfer to external system	a. Final Product	Provide file transfer capability to allow for the movement of files directly to another system
26	System	Output technical information	a. Final Product	Generate product metadata in a format for handoff to various final media outlets

27	System	Generate reports	a. Final Product b. Reports	Generate reports to: provide status of batch processing, provide inventory counts of survey data, provide verification and exception information, provide performance levels of automated tools, provide any other information that will be of use in the analysis of the tabulation process
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## Appendix D: Dissemination Action-Object Matrix

### See Excel spreadsheet “Dissemination Action-Object Matrix”

The purpose of the matrix is to provide a high-level view of the current “as is” functional requirements for the dissemination system(s). This matrix is provided as a separate file in the bidder’s library.

Instructions for reading the matrix:

Columns represent system objects.

- In general, the objects are classified as either inputs or outputs of the system.
- Within the categories of inputs and outputs, objects are further grouped into Object Classes. Multiple objects exist within a class.
- Detailed object definitions are provided in Appendix F: Tabulation Object Definitions

Rows represent system actions.

- The x’s represent the application of an action to a specific object.
- Each row is written as a requirements statement in Appendix E: Tabulation Requirements Statements.
- The row requirement number corresponds to the requirements statement in Appendix E.
- Additional, general requirements beyond system functions are included in Appendix E.
- Shading denotes unmet requirements.

### Future Functional Requirements

Potential future functional requirements are not shown on the matrix but are listed in Appendix E for future consideration by the DADS Program. Further analysis is needed to define the proper context and application to current system objects.

## Appendix E: Dissemination Functional Requirements

This list of stated requirements represents the final version of the DADS dissemination requirements, based on the analysis of the Action/Object Relationship matrix in Appendix D.

1. The system shall Extract, Transform and Load inputs
  - a. Economic Data
  - b. Demographic Data
  - c. Spatial Data
  - d. Geographic Inventory Data
  - e. Metadata
  - f. Documentation

Extract, transform and load system inputs for further processing and data transformation activities.

2. The system shall verify
  - a. Economic Data
  - b. Demographic Data
  - c. Spatial Data
  - d. Geographic Inventory Data
  - e. Metadata
  - f. Documentation

Verify that inputs conform to specifications in both structure and content.

3. The system shall create inputs
  - a. Metadata
  - b. Documentation
  - c. Derived Product Specifications

Develop system inputs such as derived product specifications as needed or requested by program areas.

4. The system shall create outputs
  - a. Metadata
  - b. Documentation
  - c. Printed Reports
  - d. Training Materials
  - e. Help
  - f. Charts
  - g. Narrative Profiles
  - h. Data Elements/Data Values
  - i. Single Geography Table (see App. F for specific examples)
  - j. Multiple Geography Table (see App. F for specific examples)

- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Transform inputs into specified product presentation formats.

5. The system shall review outputs
- a. Metadata
  - b. Documentation
  - c. Printed Reports
  - d. Training Materials
  - e. Help
  - f. Charts
  - g. Narrative Profiles
  - h. Data Elements/Data Values
  - i. Single Geography Table (see App. F for specific examples)
  - j. Multiple Geography Table (see App. F for specific examples)
  - k. Quick Reports
  - l. Detailed Tables/Base Tables
  - m. Custom Tables/User Defined Tables
  - n. Reference Map
  - o. Thematic Map
  - p. Data Files

Verify correctness of product presentation formats. Allow internal data providers the opportunity to review and clear the data for accuracy and completeness.

6. The system shall modify outputs
- a. Metadata
  - b. Documentation
  - c. Printed Reports
  - d. Training Materials
  - e. Help
  - f. Charts
  - g. Narrative Profiles
  - h. Data Elements/Data Values
  - i. Single Geography Table (see App. F for specific examples)
  - j. Multiple Geography Table (see App. F for specific examples)
  - k. Quick Reports
  - l. Detailed Tables/Base Tables
  - m. Custom Tables/User Defined Tables
  - n. Reference Map
  - o. Thematic Map

p. Data Files

Correct and update data and product presentation formats.

7. The system shall approve outputs

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Approve data and product presentation formats for public release.

8. The system shall deploy outputs

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Place approved data and product presentation formats on public web site.

9. The system shall remove outputs

- a. Metadata

- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Remove data and product presentation formats from public web site.

10. The system shall restore outputs

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Restore data and product presentation formats to public web site.

11. The system shall archive

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles

- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Place selected objects in storage and remove from public access.

12. The system shall bookmark

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Provide ability to bookmark system objects for later retrieval.

13. The system shall display

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables



- n. Reference Map
- o. Thematic Map
- p. Data Files

Render and display content on website.

14. The system shall print

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Print all or part of an object.

15. The system shall restore selection parameters

- a. Charts
- b. Narrative Profiles
- c. Data Elements/Data Values
- d. Single Geography Table (see App. F for specific examples)
- e. Multiple Geography Table (see App. F for specific examples)
- f. Quick Reports
- g. Detailed Tables/Base Tables
- h. Custom Tables/User Defined Tables
- i. Reference Map
- j. Thematic Map
- k. Data Files

Use saved selection parameters to retrieve data and product presentation formats.

16. The system shall save object

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials

- e. Help
- f. Charts
- g. Narrative Profiles

Save entire object in fixed format as presented.

17. The system shall save selection parameters

- a. Charts
- b. Narrative Profiles
- c. Data Elements/Data Values
- d. Single Geography Table (see App. F for specific examples)
- e. Multiple Geography Table (see App. F for specific examples)
- f. Quick Reports
- g. Detailed Tables/Base Tables
- h. Custom Tables/User Defined Tables
- i. Reference Map
- j. Thematic Map
- k. Data Files

Save selection parameters for data and product presentation formats.

18. The system shall search

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials
- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Provide a search capability

19. The system shall select/deselect object

- a. Metadata
- b. Documentation
- c. Printed Reports
- d. Training Materials

- e. Help
- f. Charts
- g. Narrative Profiles
- h. Data Elements/Data Values
- i. Single Geography Table (see App. F for specific examples)
- j. Multiple Geography Table (see App. F for specific examples)
- k. Quick Reports
- l. Detailed Tables/Base Tables
- m. Custom Tables/User Defined Tables
- n. Reference Map
- o. Thematic Map
- p. Data Files

Allow user to select and deselect objects.

20. The system shall select/deselect object by geographic area

- a. Charts
- b. Narrative Profiles
- c. Data Elements/Data Values
- d. Single Geography Table (see App. F for specific examples)
- e. Multiple Geography Table (see App. F for specific examples)
- f. Quick Reports
- g. Detailed Tables/Base Tables
- h. Custom Tables/User Defined Tables
- i. Reference Map
- j. Thematic Map
- k. Data Files

Allow user to select and deselect objects for all applicable geographic areas. Up to 10 million geographic areas are defined by the Census Bureau for the publication of data. These areas are classified into geographic types and organized hierarchically. Geographic selection involves the navigation and selection of the geographic areas in various ways. Note, that not all geographic areas are available for all objects; in addition, data for applicable geographic areas are published on a flow basis over a period of time. For example, Decennial data in the Census 2000 Summary File 1 were released on a state-by-state basis over a period of weeks.

21. The system shall select/deselect object by topic

- a. Charts
- b. Narrative Profiles
- c. Data Elements/Data Values
- d. Single Geography Table (see App. F for specific examples)
- e. Multiple Geography Table (see App. F for specific examples)
- f. Quick Reports
- g. Detailed Tables/Base Tables
- h. Custom Tables/User Defined Tables
- i. Reference Map

- j. Thematic Map
- k. Data Files

Allow user to select and deselect object by topic area. The Census Bureau publishes both demographic and economic data for numerous topic areas including all sectors of the economy, housing, poverty, school enrollment, age, race, and income to name a few. This selection method involves selection of various objects by topic-based navigation.

22. The system shall create user defined geographic areas
- a. Single Geography Table (see App. F for specific examples)
  - b. Detailed Tables/Base Tables
  - c. Custom Tables/User Defined Tables
  - d. Reference Map
  - e. Thematic Map

Allow users to define their own geographic areas using Census Bureau tabulation areas as building blocks.

23. The system shall display statistical significance
- a. Single Geography Table (see App. F for specific examples)
  - b. Multiple Geography Table (see App. F for specific examples)
  - c. Detailed Tables/Base Tables
  - d. Custom Tables/User Defined Tables
  - e. Thematic Map

Due to the frequency of collection and publication, data estimates require the display of statistical significance when estimates are compared over time or across geographic areas.

24. The system shall download underlying data without presentation format
- a. Single Geography Table (see App. F for specific examples)
  - b. Multiple Geography Table (see App. F for specific examples)
  - c. Quick Reports
  - d. Detailed Tables/Base Tables
  - e. Custom Tables/User Defined Tables
  - f. Reference Map
  - g. Thematic Map
  - h. Data Files

Allow the user to extract data and download it without the specified presentation format of a map or table.

25. The system shall download underlying data with presentation format
- a. Single Geography Table (see App. F for specific examples)
  - b. Multiple Geography Table (see App. F for specific examples)
  - c. Quick Reports
  - d. Detailed Tables/Base Tables

- e. Custom Tables/User Defined Tables
- f. Reference Map
- g. Thematic Map

Allow the user to extract data and download it with the specified presentation format of a map or table.

26. The system shall specify file format of downloaded data
- a. Single Geography Table (see App. F for specific examples)
  - b. Multiple Geography Table (see App. F for specific examples)
  - c. Quick Reports
  - d. Detailed Tables/Base Tables
  - e. Custom Tables/User Defined Tables
  - f. Reference Map
  - g. Thematic Map
  - h. Data Files

Allow user to select from a list of commonly used desktop software file formats for downloading data.

27. The system shall create additional columns
- a. Custom tables/user defined tables
28. The system shall filter rows
- a. Custom Tables/User Defined Tables

Allow the user to apply filters to further subset his selection criteria.

29. The system shall reorder columns
- a. Single Geography Table (see App. F for specific examples)
  - b. Custom Tables/User Defined Tables

Allow the user to change the order of the columns within a table.

30. The system shall select /deselect object by population group iterations
- a. Single Geography Table (see App. F for specific examples)
  - b. Multiple Geography Table (see App. F for specific examples)
  - c. Quick Reports
  - d. Detailed Tables/Base Tables
  - e. Custom tables/user defined tables

Allow user to select and deselect specific population groups (e.g., Italian ancestry) for which the tabulation will be shown.

31. The system shall select/deselect object columns
- a. Custom tables/user defined tables

Allow the user to create and change his selection of columns.

- 32. The system shall select/deselect object rows
  - a. Custom tables/user defined tables

Allow the user to create and change his selection of rows.

- 33. The system shall sort object rows
  - a. Custom Tables/User Defined Tables

Allow the user to sort the rows of a table by a column value.

- 34. The system shall change map data classing method
  - a. Thematic Map

Thematic maps reveal geographic patterns in statistical data; the underlying data can be classed in different ways and impact the patterns shown.

- 35. The system shall change scale
  - a. Reference Maps
  - b. Thematic Maps

Change the scale of the map display.

- 36. The system shall change the title
  - a. Reference Map
  - b. Thematic Map

Allow the user to change the title on a map or table.

- 37. The system shall identify geographic areas and data values
  - a. Thematic Map

Thematic maps use color to indicate pattern; this action allows the user to identify specific geographic areas and associated data values.

- 38. The system shall pan
  - a. Reference Maps
  - b. Thematic Maps

Panning allows the user to move the map view in different directions.

- 39. The system shall reposition within
  - a. Reference Maps
  - b. Thematic Maps

Repositioning allows the user to change the center point of the map.

40. The system shall select/deselect features, boundaries and labels within
  - a. Reference Map
  - b. Thematic Map

Allow the user to change the display of the map by adding or removing spatial layers of features and boundaries and the associated labels or names.

41. The system shall zoom
  - a. Reference Maps
  - b. Thematic Maps

Allow the user to increase or decrease the scale of the map. At larger scales, the map will show more feature/boundary details. At smaller scales, the map will show less detail feature/boundary detail.

### **Potential Future Requirements**

Potential future functional requirements are not shown on the matrix but are listed here for future consideration by the DADS Program. These ideas were collected from internal stakeholders. Further analysis is needed to define the proper context within the dissemination application. This list is not final and is subject to change based on further input.

1. The system shall allow users to create user-defined groupings of data
2. The system shall allow users to transpose rows and columns.
3. The system shall create new data from existing data, for example, percent of total or population per square mile.
4. The system shall allow the collapsing and expansion of data categories.
5. The system shall allow for the building of custom tables from multiple sources of data.
6. The system shall allow for the retrieval of data within a predefined radius from a selected location on a map.
7. The system shall flag data and geographic area corrections.

## Appendix F: Dissemination Object Definitions

### Definitions of Dissemination Matrix Objects

Object Name	Description
<b>Inputs - Data</b>	
Economic Data	Data inputs are merged with presentation format metadata to create a complete product.
Demographic Data	Data inputs are merged with presentation format metadata to create a complete product.
Spatial Data	Spatial data consists of the boundary and features used to create reference maps, thematic maps and the map-based geographic area selection mechanism.
Geographic Inventory Data	Geographic inventory data is used to create the geographic area select/deselect options for each set of objects.
<b>Inputs - Metadata</b>	
Metadata	Metadata is used to structure and present tabular and map presentation formats and derived selection mechanisms within the American FactFinder application. Additional detailed product documentation is made available as metadata.
Documentation	<p>Technical definitions and descriptions associated with results of a census or survey; topics covered include geographic area definitions, methodology descriptions, code lists, subject definitions, table outlines, data accuracy statements, data dictionaries and more.</p> <p>Census 2000 Summary File 1:  <a href="http://www.census.gov/prod/cen2000/doc/sf1.pdf">http://www.census.gov/prod/cen2000/doc/sf1.pdf</a></p> <p>American Community Survey:  <a href="http://www.census.gov/acs/www/index.html">http://www.census.gov/acs/www/index.html</a></p> <p>2002 Economic Census  <a href="http://www.census.gov/econ/census02/pub_text/sector00/cmdesc.htm">http://www.census.gov/econ/census02/pub_text/sector00/cmdesc.htm</a></p>
Derived Product Specifications	An intermediate product used to generate metadata for derived products, those products created from the Tier 2 base tables ( See Figure 3.1 Data Hierarchy)
<b>Outputs – Fixed Format, Static Products</b>	
Metadata	<p>Tier 1 metadata is collected and used to provide access to data and products such as data files made available on CD-ROM/DVDs, usually packaged with software and available for purchase; printed reports and other products.</p> <p><a href="http://factfinder.census.gov/servlet/ProductBrowserServlet?id=101884&amp;product=Census%202000%20Summary%20File%203%20%28SF%203%29%20-%20Sample%20Data%20CD-ROM&amp;lang=en">http://factfinder.census.gov/servlet/ProductBrowserServlet?id=101884&amp;product=Census%202000%20Summary%20File%203%20%28SF%203%29%20-%20Sample%20Data%20CD-ROM&amp;lang=en</a></p>



Object Name	Description
	<p>Tier 2 metadata is both created or collected as a system input in order to transform system inputs into the various product presentation formats specified by data providers.</p> <p><a href="http://factfinder.census.gov/servlet/MetadataBrowserServlet?type=all&amp;id=program&amp;lang=en">http://factfinder.census.gov/servlet/MetadataBrowserServlet?type=all&amp;id=program&amp;lang=en</a></p>
Documentation	<p>Technical definitions and descriptions associated with results of a census or survey; topics covered include geographic area definitions, methodology descriptions, code lists, subject definitions, table outlines, data accuracy statements, data dictionaries and more.</p> <p>Census 2000 Summary File 1:  <a href="http://www.census.gov/prod/cen2000/doc/sf1.pdf">http://www.census.gov/prod/cen2000/doc/sf1.pdf</a></p> <p>American Community Survey:  <a href="http://www.census.gov/acs/www/index.html">http://www.census.gov/acs/www/index.html</a></p> <p>2002 Economic Census  <a href="http://www.census.gov/econ/census02/pub_text/sector00/cmdesc.htm">http://www.census.gov/econ/census02/pub_text/sector00/cmdesc.htm</a></p>
Printed Reports	Published reports containing narrative text with supporting tables, maps, and charts on a particular topic.
Training Materials	<p>Training materials are currently provided through the help system and as individual documents:</p> <p><a href="http://factfinder.census.gov/home/en/epss/tutorials.html">http://factfinder.census.gov/home/en/epss/tutorials.html</a></p> <p><a href="http://factfinder.census.gov/home/saff/aff_acs2004_quickguide.pdf">http://factfinder.census.gov/home/saff/aff_acs2004_quickguide.pdf</a></p>
Help	<a href="http://factfinder.census.gov/home/en/epss/toc.html">http://factfinder.census.gov/home/en/epss/toc.html</a>
Chart	A visual display of information in the form of a chart. Currently, charts are displayed in either printed reports or narrative profiles.
Narrative Profile	An html template version of a printed report consisting of text narrative interspersed with data, tables and charts.
<b>Outputs – Data Elements</b>	
Economic Data	<p>Individual data points or characteristics from multiple sources presented in charts, graphs, table or narrative text format.</p> <p>Economic Indicator example:</p>

Object Name	Description
	<a href="http://www.census.gov/cgi-bin/briefroom/BriefRm">http://www.census.gov/cgi-bin/briefroom/BriefRm</a>
Demographic Data	<p>Individual data points or characteristics from multiple sources presented in charts, graphs, table or narrative text format.</p> <p>The Population Finder tool presents the Total Population from 3 sources: the most current Population Estimate, Census 2000 and the 1990 Census:</p> <p><a href="http://factfinder.census.gov/servlet/SAFFPopulation?_sse=on">http://factfinder.census.gov/servlet/SAFFPopulation?_sse=on</a></p>
<b>Outputs – Tables, Single Geography Table</b>	
Fact Sheet	<p>A table showing multiple characteristics for a single geographic area, industry or a population group.</p> <ul style="list-style-type: none"> <li>▪ Fixed data column headings</li> <li>▪ Fixed data row stubs</li> <li>▪ Embedded links to maps, documents and tables.</li> <li>▪ Sourced from multiple data sets</li> </ul> <p><a href="http://factfinder.census.gov/servlet/SAFFFacts?_sse=on">http://factfinder.census.gov/servlet/SAFFFacts?_sse=on</a></p>
Selected Population Profile	<p>A table showing multiple characteristics for a single geographic area and a single population group.</p> <ul style="list-style-type: none"> <li>▪ Fixed data column headings</li> <li>▪ Fixed data row stubs</li> <li>▪ Sourced from a single data set</li> </ul> <p>No example available yet.</p>
Subject Table/Quick Table/Non-iterated Selected Population Profile/Multi-year Profile	<p>A table showing multiple characteristics for a single geographic area and/or a population group.</p> <ul style="list-style-type: none"> <li>▪ Fixed data column headings</li> <li>▪ Fixed data row stubs</li> <li>▪ Sourced from a single data set</li> </ul> <p>Subject Tables are produced for the American Community Survey.</p> <p><a href="http://factfinder.census.gov/servlet/STTable?_bm=y&amp;-qr_name=ACS_2004_EST_G00_S2002&amp;-geo_id=01000US&amp;-ds_name=ACS_2004_EST_G00_&amp;-format=&amp;-CONTEXT=st">http://factfinder.census.gov/servlet/STTable?_bm=y&amp;-qr_name=ACS_2004_EST_G00_S2002&amp;-geo_id=01000US&amp;-ds_name=ACS_2004_EST_G00_&amp;-format=&amp;-CONTEXT=st</a></p>

Object Name	Description
	<p>Quick Tables are produced for the Decennial Census.</p> <p><a href="http://factfinder.census.gov/servlet/QTTable?_bm=y&amp;-qr_name=DEC_2000_SF1_U_QTP1&amp;-geo_id=01000US&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-redoLog=false&amp;-sse=on">http://factfinder.census.gov/servlet/QTTable?_bm=y&amp;-qr_name=DEC_2000_SF1_U_QTP1&amp;-geo_id=01000US&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-redoLog=false&amp;-sse=on</a></p> <p>Non-iterated Selected Population Profiles are produced for the American Community Survey.</p> <p>Multi-year Profiles are produced for the American Community Survey.</p> <p><a href="http://factfinder.census.gov/servlet/MYPTTable?_bm=y&amp;-qr_name=ACS_2004_EST_G00_MYP1_15&amp;-geo_id=01000US&amp;-ds_name=">http://factfinder.census.gov/servlet/MYPTTable?_bm=y&amp;-qr_name=ACS_2004_EST_G00_MYP1_15&amp;-geo_id=01000US&amp;-ds_name=</a></p>
Demographic Profiles/Tabular Profiles	<p>A table showing multiple characteristics and/or derived measures such as percents, mean median, for a single geographic area and/or population group.</p> <ul style="list-style-type: none"> <li>▪ Fixed data column headings</li> <li>▪ Fixed data row stubs</li> <li>▪ Sourced from a single data set</li> </ul> <p>Demographic Profiles are produced for the Decennial Census and include counts and derived measures (e.g., percents, medians).</p> <p><a href="http://factfinder.census.gov/servlet/QTTable?_bm=y&amp;-geo_id=01000US&amp;-qr_name=DEC_2000_SF1_U_DP1&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-sse=on">http://factfinder.census.gov/servlet/QTTable?_bm=y&amp;-geo_id=01000US&amp;-qr_name=DEC_2000_SF1_U_DP1&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-sse=on</a></p> <p>Tabular Profiles are produced for the American Community Survey and include an estimate, and the lower and upper bound for the 90 percent confidence interval produced with the estimate.</p> <p><a href="http://factfinder.census.gov/servlet/ADPTTable?_bm=y&amp;-geo_id=01000US&amp;-qr_name=ACS_2004_EST_G00_DP1&amp;-ds_name=ACS_2004_EST_G00_&amp;-lang=en&amp;-sse=on">http://factfinder.census.gov/servlet/ADPTTable?_bm=y&amp;-geo_id=01000US&amp;-qr_name=ACS_2004_EST_G00_DP1&amp;-ds_name=ACS_2004_EST_G00_&amp;-lang=en&amp;-sse=on</a></p>
Geographic Quick Report	<p>A table showing multiple characteristics for a single geography.</p> <ul style="list-style-type: none"> <li>▪ Fixed data column headings</li> <li>▪ Fixed data row stubs</li> <li>▪ Sourced from a single data set</li> </ul> <p><a href="http://factfinder.census.gov/servlet/GQRTTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=EC0200A1&amp;-lang=en">http://factfinder.census.gov/servlet/GQRTTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=EC0200A1&amp;-lang=en</a></p>

Object Name	Description
<b>Outputs – Tables, Multi Geography Table</b>	
Ranking Table	<p>A table showing values or estimates of a single characteristic for multiple geographic areas in numeric order.</p> <ul style="list-style-type: none"> <li>Fixed data column headings</li> <li>Variable row stubs of geographic areas</li> <li>Sourced from a single data set</li> </ul> <p><a href="http://factfinder.census.gov/servlet/GRTTable?_bm=y&amp;-_box_head_nbr=R1001&amp;-ds_name=ACS_2004_EST_G00_&amp;-format=US-30&amp;-CONTEXT=grt">http://factfinder.census.gov/servlet/GRTTable?_bm=y&amp;-_box_head_nbr=R1001&amp;-ds_name=ACS_2004_EST_G00_&amp;-format=US-30&amp;-CONTEXT=grt</a></p>
Geographic Comparison Table	<p>A table showing values or estimates and derived measures of a multiple characteristics for multiple geographic areas in alphabetic order.</p> <ul style="list-style-type: none"> <li>Fixed data column headings</li> <li>Variable row stubs of geographic areas</li> <li>Sourced from a single data set</li> </ul> <p><a href="http://factfinder.census.gov/home/saff/en/gct_example.html">http://factfinder.census.gov/home/saff/en/gct_example.html</a></p>
<b>Outputs - Quick Reports</b>	
Product Quick Report	<p>A table showing multiple characteristics for a single product or industry.</p> <ul style="list-style-type: none"> <li>Fixed data column headings</li> <li>Fixed data row stubs</li> <li>Sourced from a single data set</li> </ul> <p><a href="http://factfinder.census.gov/servlet/PORTable?_bm=y&amp;-ds_name=EC0200SL1&amp;-MFG=313113&amp;-ib_type=NAICS2002&amp;-ib_code=31&amp;-_lang=en">http://factfinder.census.gov/servlet/PORTable?_bm=y&amp;-ds_name=EC0200SL1&amp;-MFG=313113&amp;-ib_type=NAICS2002&amp;-ib_code=31&amp;-_lang=en</a></p>
Industry Quick Report	<p>A table showing multiple characteristics for a single industry.</p> <ul style="list-style-type: none"> <li>Fixed data column headings</li> <li>Fixed data row stubs</li> <li>Sourced from a single data set</li> </ul> <p><a href="http://factfinder.census.gov/servlet/IQRTTable?_bm=y&amp;-ds_name=EC0200A1&amp;-NAICS2002=236118&amp;-_lang=en">http://factfinder.census.gov/servlet/IQRTTable?_bm=y&amp;-ds_name=EC0200A1&amp;-NAICS2002=236118&amp;-_lang=en</a></p>
<b>Outputs – Detailed Table/Base Table and Custom/User-defined Table</b>	
Detailed	A table showing multiple characteristics for a single geographic area and/or a

Object Name	Description
Table/Base Table	<p>population group.</p> <p>Decennial – Detailed Tables</p> <ul style="list-style-type: none"> <li>Variable geographic areas column headings</li> <li>Fixed data row stubs</li> <li>Sourced from a single data set</li> </ul> <p>Example: <a href="http://factfinder.census.gov/servlet/DTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-redoLog=true&amp;-mt_name=DEC_2000_SF1_U_P012&amp;-format=&amp;-CONTEXT=dt">http://factfinder.census.gov/servlet/DTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=DEC_2000_SF1_U&amp;-lang=en&amp;-redoLog=true&amp;-mt_name=DEC_2000_SF1_U_P012&amp;-format=&amp;-CONTEXT=dt</a></p> <p>American Community Survey – Base Tables</p> <ul style="list-style-type: none"> <li>Fixed data column headings</li> <li>Fixed data row stubs</li> <li>Sourced from a single data set</li> </ul> <p>Example: <a href="http://factfinder.census.gov/servlet/DTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=ACS_2004_EST_G00_&amp;-lang=en&amp;-mt_name=ACS_2004_EST_G2000_B01001&amp;-format=&amp;-CONTEXT=dt">http://factfinder.census.gov/servlet/DTable?_bm=y&amp;-geo_id=01000US&amp;-ds_name=ACS_2004_EST_G00_&amp;-lang=en&amp;-mt_name=ACS_2004_EST_G2000_B01001&amp;-format=&amp;-CONTEXT=dt</a></p>
Custom Table/User Defined Table	<p>A table showing one or more selected characteristics for one or more selected geographic areas. Currently, these tables are created from base tables or detailed tables by selection one or more data elements from multiple tables within a data set.</p> <ul style="list-style-type: none"> <li>Variable data column headings</li> <li>Variable geographic row stubs</li> <li>Currently limited to sourcing from a single data set</li> </ul>
<b>Outputs - Maps</b>	
Reference Map	<p>A map that shows selected geographic boundaries with identifiers along with selected features of a geographic area.</p> <p><a href="http://factfinder.census.gov/servlet/ReferenceMapFramesetServlet?_bm=y&amp;-lang=en">http://factfinder.census.gov/servlet/ReferenceMapFramesetServlet?_bm=y&amp;-lang=en</a></p>
Thematic Map	<p>A map that reveals geographic patterns in statistical data.</p> <p><a href="http://factfinder.census.gov/servlet/ThematicMapFramesetServlet?_bm=y&amp;-lang=en">http://factfinder.census.gov/servlet/ThematicMapFramesetServlet?_bm=y&amp;-lang=en</a></p>
<b>Outputs – Data Files (generic definition provided in Table 3.1)</b>	
Economic	Economic Wide Files or Sector Specific Files are published

Object Name	Description
Census	<a href="http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ECN&amp;lang=en&amp;_ts=143572964578">http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ECN&amp;lang=en&amp;_ts=143572964578</a>
Economic Surveys	Survey Specific Files <a href="http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=EAS&amp;lang=en&amp;_ts=143572899750">http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=EAS&amp;lang=en&amp;_ts=143572899750</a>
Population and Housing Censuses	Decennial Census – 100-percent and Sample Files <a href="http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&amp;lang=en&amp;_ts=143572699250">http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&amp;lang=en&amp;_ts=143572699250</a>
Population and Housing Surveys	American Community Survey: Single year, 3-year and 5-year estimates <a href="http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&amp;lang=en&amp;_ts=143572838250">http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&amp;lang=en&amp;_ts=143572838250</a>
Population Estimates	Population Estimates Data Set page <a href="http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=PEP&amp;lang=en&amp;_ts=143572883109">http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=PEP&amp;lang=en&amp;_ts=143572883109</a>
Public Use Microdata (PUMS) Files	American Community Survey 2004 PUMS <a href="http://factfinder.census.gov/home/en/acs_pums_2004.html">http://factfinder.census.gov/home/en/acs_pums_2004.html</a>
File Transfer Protocol (FTP) “Download Ready” Files	Data base ready files made available to download via File Transfer Protocol from the Census Bureau FTP Site <a href="http://www2.census.gov/">http://www2.census.gov/</a>

## Anatomy of a Table

Quick Table Example - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites

Table number and title  
 Source of the Data  
 Single Geographic Area

QT-H1. **General Housing Characteristics: 2000**  
 Data Set: [Census 2000 Summary File 1 \(SF 1\) 100-Percent Data](#)  
 Geographic Area: **United States**

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://factfinder.census.gov/home/en/data/notes/express1u.htm>.

Headnote

Columns

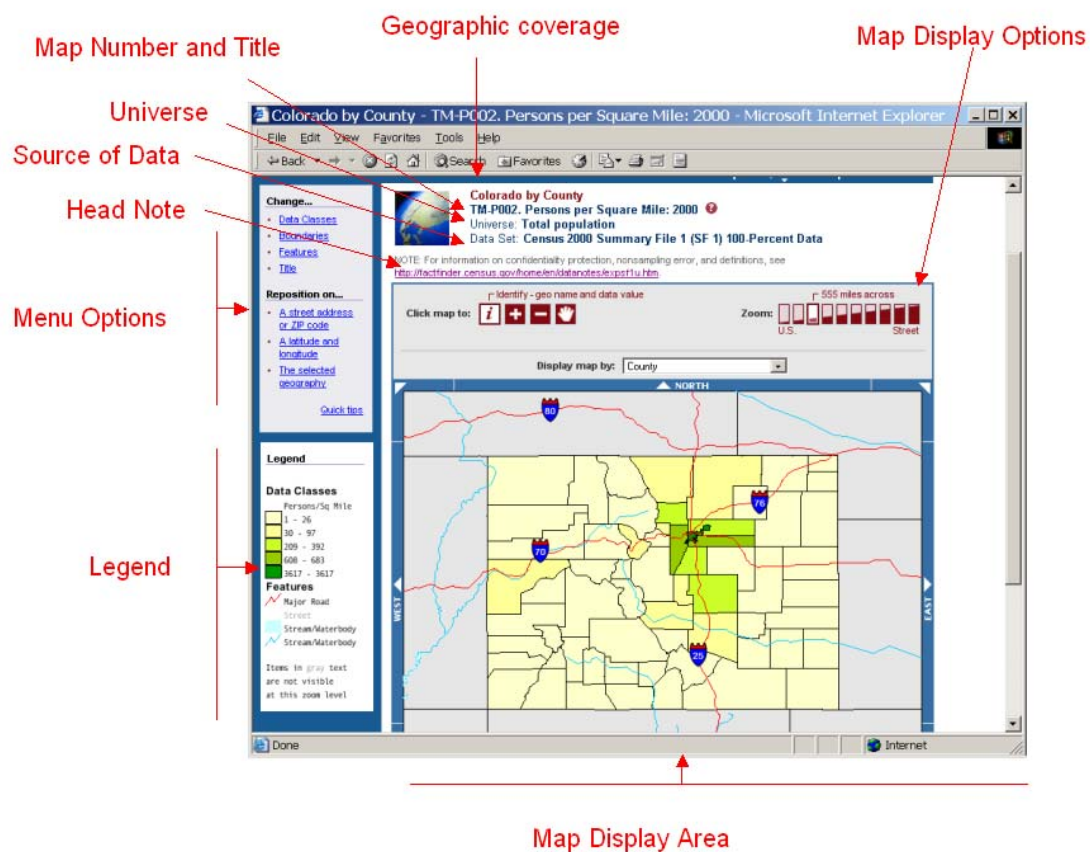
Rows

Subject	Number	Percent
<b>OCCUPANCY STATUS</b>		
<b>Total housing units</b>	<b>115,904,641</b>	<b>100.0</b>
Occupied housing units	105,480,101	91.0
Vacant housing units	10,424,540	9.0
<b>TEHURE</b>		
<b>Occupied housing units</b>	<b>105,480,101</b>	<b>100.0</b>
Owner-occupied housing units	69,815,753	66.2
Renter-occupied housing units	35,664,348	33.8
...		
<b>AGE OF HOUSEHOLDER</b>		
<b>Occupied housing units</b>	<b>105,480,101</b>	<b>100.0</b>
15 to 24 years	5,533,813	5.2
25 to 34 years	18,297,815	17.3
35 to 44 years	23,968,233	22.7
45 to 54 years	21,292,629	20.2
55 to 64 years	14,247,057	13.5
65 years and over	22,140,754	21.0
65 to 74 years	11,507,562	10.9
75 to 84 years	8,205,480	7.8
85 years and over	2,427,712	2.3

(X) Not applicable.  
 Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Footnote

## Anatomy of a Thematic Map





## Appendix G: Non-functional Requirements: Dissemination and Tabulation

<b>Dissemination</b>	
<b>Type</b>	<b>Statement</b>
Department of Commerce Standards	The system shall adhere to Department of Commerce policies:  <a href="http://www.osec.doc.gov/webresources/DOCWebPolicies_BestPractices.html">http://www.osec.doc.gov/webresources/DOCWebPolicies_BestPractices.html</a>
Legal Standards	The system shall comply with Section 508 of the Rehabilitation Act Amendments of 1998, Electronic and Information Technology Accessibility Standards, 36 CFR Part 1194.  <a href="http://cww.census.gov/icg/archives/section_508/index.html">http://cww.census.gov/icg/archives/section_508/index.html</a>
Legal Standards	The system shall employ techniques to ensure adherence to Title 13 Policy:  <a href="http://cww.census.gov/po/title13/13usc2003.htm">http://cww.census.gov/po/title13/13usc2003.htm</a>
Operational - DADS	DADS shall forward user requests for data corrections to the responsible program area OR inform the user how to submit such a request per Census Bureau Section 515 Information Quality Guidelines
Operational - DADS	DADS shall obtain Disclosure Review Board approval for the disclosure avoidance methodologies employed by any DADS system, which produces data from microdata, unless the data output acts as an input to a data product for which DRB approval has already been obtained.
Operational - DADS	DADS shall conduct extensive usability tests to ensure that its data presentations are accessible and understandable to its data users.
Operational - DADS	DADS shall support, as appropriate, efforts of survey sponsors to consult with data users on relevance and appropriateness of data/data products.
Operational - System	The system shall display the a. System version information b. Date of last update
Operational - System	The system shall provide error checking and reporting
Operational - System	The system shall produce the design of derived products.
Operational - System	The system shall process one or multiple specification files.
Operational - System	The system shall uniquely identify output files.
Operational - System	The system shall indicate when data have been revised and reissued.
Operational - System	The system logs user feedback.
Operational - System	The system shall provide a role-based interface.
Operational - System	The system shall support the timely dissemination of data and data products. Timeliness encompasses frequency of data dissemination, as well as the closeness of the release to the data's reference period.
Operational - System	The system shall logically organize the metadata in a manner consist with Census

	Bureau practices as embodied by the Corporate Metadata Repository.
Operational - System	The system shall support the release of revisions to previously released data and data products
Performance	The system shall allow access by 4500 simultaneous users.
Performance	The system shall be backwards compatible with the current system.
Performance	The system shall run on a TBD set of browsers and operating systems.
Performance	The system shall target query response times for specified interactions agreed upon by the contractor and DADS Program office.
Performance	<p>The system shall log statistics on:</p> <ul style="list-style-type: none"> <li>▪ The number of unique users</li> <li>▪ The number of repeat uses</li> <li>▪ The number of visits</li> <li>▪ The amount of downloaded data</li> <li>▪ User requests by product type</li> <li>▪ User navigation and selection options.</li> <li>▪ User actions that fail to complete</li> <li>▪ System availability</li> <li>▪ System response times for typical user actions</li> </ul>
Quality Standards (1)	<p>The system shall adhere to Census Bureau standards for the Definitions of Survey and Census Metadata.</p> <p><a href="http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81476&amp;_dad=portal30&amp;_schema=PORTAL30">http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81476&amp;_dad=portal30&amp;_schema=PORTAL30</a></p>
Quality Standards (2)	<p>The system shall adhere to Census Bureau standards for the Source and Accuracy Statements.</p> <p><a href="http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81476&amp;_dad=portal30&amp;_schema=PORTAL30">http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81476&amp;_dad=portal30&amp;_schema=PORTAL30</a></p>
Quality Standards (3)	<p>The system shall adhere to Census Bureau standards for the Dissemination of Census and Survey Data.</p> <p><a href="http://cmr.ssd.census.gov:7779/pls/portal30/PORTAL30.wwsbr_int_services.GenericView?p_docname=6724.WPD&amp;p_type=DOC&amp;p_viewservice=VAH&amp;p_searchstring=">http://cmr.ssd.census.gov:7779/pls/portal30/PORTAL30.wwsbr_int_services.GenericView?p_docname=6724.WPD&amp;p_type=DOC&amp;p_viewservice=VAH&amp;p_searchstring=</a></p>
Quality Standards (4)	<p>The system shall adhere to Census Bureau standards for the Dissemination of Statistical Information Products to the Public.</p> <p><a href="http://cmr.ssd.census.gov:7779/pls/portal30/PORTAL30.wwsbr_int_services.GenericView?p_docname=6724.WPD&amp;p_type=DOC&amp;p_viewservice=VAH&amp;p_searchstring=">http://cmr.ssd.census.gov:7779/pls/portal30/PORTAL30.wwsbr_int_services.GenericView?p_docname=6724.WPD&amp;p_type=DOC&amp;p_viewservice=VAH&amp;p_searchstring=</a></p>
Quality Standards (5)	<p>The system shall adhere to Census Bureau standards for Correcting Information for OMB 515</p> <p><a href="http://www.census.gov/quality/">http://www.census.gov/quality/</a></p>
Quality Standards (6)	<p>The system shall adhere to Census Bureau standards for Presentation of Statistical Graphics</p> <p><a href="http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81506&amp;_dad=portal30&amp;_schema=PORTAL30">http://cmr.ssd.census.gov:7779/portal/page?_pageid=9,63,9_81506&amp;_dad=portal30&amp;_schema=PORTAL30</a></p>

U.S. Census Bureau Standards	The system shall adhere to U.S. Census Bureau Corporate Identity standards. <a href="http://cww.acsd.census.gov/services/Publications_Printing_and_Forms_Design_Services/CensusIDStandards.htm">http://cww.acsd.census.gov/services/Publications_Printing_and_Forms_Design_Services/CensusIDStandards.htm</a>
U.S. Census Bureau Standards	The system shall adhere to U.S. Census Bureau IT Standard 15.0.2. Web Development Requirements and Guidelines <a href="http://cww.census.gov/icg/archives/standards_policies/002884.html">http://cww.census.gov/icg/archives/standards_policies/002884.html</a>
System Engineering/Security	The system shall grant access to Title 13 data only from within the Census Bureau's firewall.
System Engineering/Security	The system shall provide pass security certification and accreditation as defined by the U.S. Census Bureau Information Technology Security Office. <a href="http://contribute.ssd.census.gov/it/itso/itso_C&amp;A.asp">http://contribute.ssd.census.gov/it/itso/itso_C&amp;A.asp</a>
<b>Tabulation</b>	
<b>Type</b>	<b>Statement</b>
	DADS will have sufficient disk space to store anticipated datasets, intermediate results, databases, output files, product files, log files (up to 6 months' duration), and other permanent records produced according to production schedule. Certain materials not immediately needed may be compressed and/or moved to archival storage such as tape (yuk).
	The details of each user product-creation and component-modification will be recorded to allow possible audit. Logs will be accessible without recourse to a particular auditing tool.
	All production events are executed completely subject to the availability of materials including product specifications, geographic data, detail-file metadata, and detail-file data provided by non-DADS sources.
	All production events will provide accurate results subject to the adequacy of materials including product specifications, geographic data, detail-file metadata, and detail-file data provided by non-DADS sources.
	Integrity of information and operation entails will be maintained by controlling and tracking creation, alteration, and deletion of data files.
	"On Demand" systems shall provide role-based security.

## Appendix H: Tabulation Product Deliverables

The following list of Tabulation Product Deliverables and the Public Release dates should not be considered to be final or complete. It reflects the current understanding of the tabulation requirements for the DADS Program and is subject to change.

Major Data Product Tabulations/Releases	Public Release (approximate timing)
<b>2010 Census Products</b>	
2010 Census Summary File 1	Summer 2011
2010 Census Summary File 2	Winter 2012
2010 Public Use Microdata (PUMS) File	TBD
2010 American Samoa Summary File	TBD
2010 Guam Summary File	TBD
2010 Commonwealth of the Northern Mariana Islands Summary File	TBD
2010 U.S. Virgin Islands Summary File	TBD
2010 Island Area Public Use Microdata (PUMS) File	TBD
<b>Redistricting Data Office Products</b>	
2010 Census Redistricting Data (P.L. 94-171) Summary File	January 2011
113 <sup>th</sup> Congressional District Summary File – 100 Percent	Fall 2012
114 <sup>th</sup> Congressional District Summary File – 100 Percent	Fall 2014
<b>Special Tabulations</b>	
School Districts	2013
As requested on a case by case basis throughout the decade using the 2010 short form microdata files	TBD

## Appendix I: Dissemination Product Deliverables

The following list of Dissemination Product Deliverables and the Public Release dates should not be considered to be final or complete. It reflects the current understanding of the dissemination requirements for the DADS Program and is subject to change. Shaded items indicate are those products the Census Bureau anticipates will already be released to the public at the time of the DADS II Contract award.

Contract Period Major Data Product Releases	Public Release (approximate timing)
<b>Demographic Directorate – Census Data Products</b>	
1990 Census Summary Tape File 1 - United States	Released
1990 Census Summary Tape File 3 – United States	Released
Census 2000 Summary File 1 – United States and Puerto Rico	Released
Census 2000 Summary File 2 - United States and Puerto Rico	Released
Census 2000 Summary File 3 – United States and Puerto Rico	Released
Census 2000 Summary File 4 – United States and Puerto Rico	Released
Census 2000 American Indian and Alaska Native Summary File	Released
American Samoa Summary File	Released
Guam Summary File	Released
Commonwealth of the Northern Mariana Islands Summary File	Released
U.S. Virgin Islands Summary File	Released
<b>2010 Census Products</b>	
2008 Dress Rehearsal Products	TBD
2010 Census Summary File 1	Summer 2011
2010 Census Summary File 2	Winter 2012
2010 Public Use Microdata (PUMS) File	TBD
<b>2010 Island Area Products</b>	
American Samoa Summary File	TBD
Guam Summary File	TBD
Commonwealth of the Northern Mariana Islands Summary File	TBD
U.S. Virgin Islands Summary File	TBD
Puerto Rico Note: May be included with 2010 Census products or produced as a separate product	TBD
<b>Redistricting Data Office Products</b>	
109th Congressional District Summary File - Sample	Released
109th Congressional District Summary File – 100 Percent	Released
110th Congressional District Summary File - Sample	Released
110th Congressional District Summary File – 100 Percent	Released
Census 2000 Redistricting Data (P.L. 94-171) Summary File	Released
2010 Census Redistricting Phase 1 State Legislative District Files (based on Census 2000)	Released
2010 Census Redistricting Data (P.L. 94-171) Summary File	March 2011
113th Congressional District Summary File – 100 Percent	January 2013
114th Congressional District Summary File – 100 Percent	January 2015
<b>2000 - 2004</b>	
2000 American Community Survey	Released
2001 American Community Survey	Released

<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2002 American Community Survey	Released
2003 American Community Survey	Released
2004 American Community Survey	Released
<b>2005</b>	
2005 American Community Survey, Wave 1	Released
2005 American Community Survey, Wave 2	Released
2005 Puerto Rico Community Survey, Wave 1 (English)	Released
2005 Puerto Rico Community Survey, Wave 2 (English)	Released
2005 Puerto Rico Community Survey, Wave 1 (Spanish)	Released
2005 Puerto Rico Community Survey, Wave 2 (Spanish)	Released
2005 American Community Survey PUMS File	Released
<b>2006</b>	
2006 American Community Survey, Wave 1	Aug 2007
2006 American Community Survey, Wave 2	Nov 2007
2006 Puerto Rico Community Survey, Wave 1 (English)	TBD
2006 Puerto Rico Community Survey, Wave 2 (English)	TBD
2006 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2006 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2006 American Community Survey PUMS File	TBD
<b>2007</b>	
2007 American Community Survey, Wave 1	Aug 2008
2007 American Community Survey, Wave 2	Nov 2008
2007 Puerto Rico Community Survey, Wave 1 (English)	TBD
2007 Puerto Rico Community Survey, Wave 2 (English)	TBD
2007 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2007 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2005-2007 American Community Survey (3 year averages)	TBD
2005-2007 Puerto Rico Community Survey (3 year averages English)	TBD
2005-2007 Puerto Rico Community Survey (3 year averages - Spanish)	TBD
2007 American Community Survey PUMS File	TBD
<b>2008</b>	
2008 American Community Survey, Wave 1	Aug 2009
2008 American Community Survey, Wave 2	Nov 2009
2008 Puerto Rico Community Survey, Wave 1 (English)	TBD
2008 Puerto Rico Community Survey, Wave 2 (English)	TBD
2008 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2008 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2006-2008 American Community Survey (3 year averages)	TBD
2006-2008 Puerto Rico Community Survey (3 year averages English)	TBD
2006-2008 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2008 American Community Survey PUMS File	TBD
<b>2009</b>	
2009 American Community Survey, Wave 1	Aug 2010
2009 American Community Survey, Wave 2	Nov 2010
2009 Puerto Rico Community Survey, Wave 1 (English)	TBD
2009 Puerto Rico Community Survey, Wave 2 (English)	TBD
2009 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD

<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2009 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2007-2009 American Community Survey (3 year averages)	TBD
2007-2009 Puerto Rico Community Survey (3 year averages English)	TBD
2007-2009 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2005-2009 American Community Survey (5 year averages)	TBD
2005-2009 Puerto Rico Community Survey (5 year averages English)	TBD
2005-2009 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2009 American Community Survey PUMS File	TBD
<b>2010</b>	
2010 American Community Survey, Wave 1	Aug 2011
2010 American Community Survey, Wave 2	Nov 2011
2010 Puerto Rico Community Survey, Wave 1 (English)	TBD
2010 Puerto Rico Community Survey, Wave 2 (English)	TBD
2010 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2010 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2008-2010 American Community Survey (3 year averages)	TBD
2008-2010 Puerto Rico Community Survey (3 year averages English)	TBD
2008-2010 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2006-2010 American Community Survey (5 year averages)	TBD
2006-2010 Puerto Rico Community Survey (5 year averages English)	TBD
2006-2010 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2010 American Community Survey PUMS File	TBD
<b>2011</b>	
2011 American Community Survey, Wave 1	Aug 2012
2011 American Community Survey, Wave 2	Nov 2012
2011 Puerto Rico Community Survey, Wave 1 (English)	TBD
2011 Puerto Rico Community Survey, Wave 2 (English)	TBD
2011 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2011 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2009-2011 American Community Survey (3 year averages)	TBD
2009-2011 Puerto Rico Community Survey (3 year averages English)	TBD
2009-2011 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2007-2011 American Community Survey (5 year averages)	TBD
2007-2011 Puerto Rico Community Survey (5 year averages English)	TBD
2007-2011 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2011 American Community Survey PUMS File	TBD
<b>2012</b>	
2012 American Community Survey, Wave 1	Aug 2013
2012 American Community Survey, Wave 2	Nov 2013
2012 Puerto Rico Community Survey, Wave 1 (English)	TBD
2012 Puerto Rico Community Survey, Wave 2 (English)	TBD
2012 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2012 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2010-2012 American Community Survey (3 year averages)	TBD
2010-2012 Puerto Rico Community Survey (3 year averages English)	TBD
2010-2012 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2008-2012 American Community Survey (5 year averages)	TBD



<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2008-2012 Puerto Rico Community Survey (5 year averages English)	TBD
2008-2012 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2012 American Community Survey PUMS File	TBD
<b>2013</b>	
2013 American Community Survey, Wave 1	Aug 2014
2013 American Community Survey, Wave 2	Nov 2014
2013 Puerto Rico Community Survey, Wave 1 (English)	TBD
2013 Puerto Rico Community Survey, Wave 2 (English)	TBD
2013 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2013 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2011-2013 American Community Survey (3 year averages)	TBD
2011-2013 Puerto Rico Community Survey (3 year averages English)	TBD
2011-2013 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2009-2013 American Community Survey (5 year averages)	TBD
2009-2013 Puerto Rico Community Survey (5 year averages English)	TBD
2009-2013 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2013 American Community Survey PUMS File	TBD
<b>2014</b>	
2014 American Community Survey, Wave 1	Aug 2015
2014 American Community Survey, Wave 2	Nov 2015
2014 Puerto Rico Community Survey, Wave 1 (English)	TBD
2014 Puerto Rico Community Survey, Wave 2 (English)	TBD
2014 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2014 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2012-2014 American Community Survey (3 year averages)	TBD
2012-2014 Puerto Rico Community Survey (3 year averages English)	TBD
2012-2014 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2010-2014 American Community Survey (5 year averages)	TBD
2010-2014 Puerto Rico Community Survey (5 year averages English)	TBD
2010-2014 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2014 American Community Survey PUMS File	TBD
<b>2015</b>	
2015 American Community Survey, Wave 1	Aug 2016
2015 American Community Survey, Wave 2	Nov 2016
2015 Puerto Rico Community Survey, Wave 1 (English)	TBD
2015 Puerto Rico Community Survey, Wave 2 (English)	TBD
2015 Puerto Rico Community Survey, Wave 1 (Spanish)	TBD
2015 Puerto Rico Community Survey, Wave 2 (Spanish)	TBD
2013-2015 American Community Survey (3 year averages)	TBD
2013-2015 Puerto Rico Community Survey (3 year averages English)	TBD
2013-2015 Puerto Rico Community Survey (3 year averages Spanish)	TBD
2011-2015 American Community Survey (5 year averages)	TBD
2011-2015 Puerto Rico Community Survey (5 year averages English)	TBD
2011-2015 Puerto Rico Community Survey (5 year averages Spanish)	TBD
2015 American Community Survey PUMS File	TBD
<b>Population Estimates</b>	
<b>2005</b>	



<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2005 Population Estimates, Part 1 (States)	Released
2005 Population Estimates, Part 2 (Counties)	Released
2005 Population Estimates, Part 3 (Places and County Subdivisions)	Released
2005 Population Estimates, Part 4 (Metro/Micro Areas)	Released
<b>2006</b>	
2006 Population Estimates, Part 1 (States)	December 2006
2006 Population Estimates, Part 2 (Counties)	March 2007
2006 Population Estimates, Part 3 (Places and County Subdivisions)	June 2007
2006 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2007
<b>2007</b>	
2007 Population Estimates, Part 1 (States)	December 2007
2007 Population Estimates, Part 2 (Counties)	March 2008
2007 Population Estimates, Part 3 (Places and County Subdivisions)	June 2008
2007 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2008
<b>2008</b>	
2008 Population Estimates, Part 1 (States)	December 2008
2008 Population Estimates, Part 2 (Counties)	March 2009
2008 Population Estimates, Part 3 (Places and County Subdivisions)	June 2009
2008 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2009
<b>2009</b>	
2009 Population Estimates, Part 1 (States)	December 2009
2009 Population Estimates, Part 2 (Counties)	March 2010
2009 Population Estimates, Part 3 (Places and County Subdivisions)	June 2010
2009 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2010
<b>2011</b>	
2011 Population Estimates, Part 1 (States)	December 2011
2011 Population Estimates, Part 2 (Counties)	March 2012
2011 Population Estimates, Part 3 (Places and County Subdivisions)	June 2012
2011 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2012
<b>2012</b>	
2012 Population Estimates, Part 1 (States)	December 2012
2012 Population Estimates, Part 2 (Counties)	March 2013
2012 Population Estimates, Part 3 (Places and County Subdivisions)	June 2013
2012 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2013
<b>2013</b>	
2013 Population Estimates, Part 1 (States)	December 2013
2013 Population Estimates, Part 2 (Counties)	March 2014
2013 Population Estimates, Part 3 (Places and County Subdivisions)	June 2014
2013 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2014
<b>2014</b>	
2014 Population Estimates, Part 1 (States)	December 2014
2014 Population Estimates, Part 2 (Counties)	March 2015
2014 Population Estimates, Part 3 (Places and County Subdivisions)	June 2015
2014 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2015
<b>2015</b>	
2015 Population Estimates, Part 1 (States)	December 2015
2015 Population Estimates, Part 2 (Counties)	March 2016

<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2015 Population Estimates, Part 3 (Places and County Subdivisions)	June 2016
2015 Population Estimates, Part 4 (Metro/Micro Areas)	Spring 2065
<b>Economic Directorate – Census Data Products</b>	
1997 Economic Census – United States	Released
2002 Economic Census and Surveys – United States	Released
2002 Economic Census and Surveys – Island Areas	Released
2002 Survey of Business Owners	Released
2002 Business Expenditure Survey	Released
<b>2007</b>	
2007 Economic Census and Surveys – United States	on demand flow release
2007 Economic Census and Surveys – Island Areas	Aug 2008 – June 2012
2007 Survey of Business Owners	Fall 2010
2007 Business Expenditure Survey	TBD
2007 Vehicle Inventory Use Survey (VIUS)	on demand flow release Aug 2008 – Aug 2009
2007 Commodity Flow Survey (CFS) – Preliminary Report	Dec 2008
2007 Commodity Flow Survey (CFS) – Final Release	Fall 2009
<b>2012</b>	
2012 Economic Census and Surveys – United States	on demand flow release
2012 Economic Census and Surveys – Island Areas	Aug 2013 – June ???
<b>Economic Directorate – Survey Data Products</b>	
<b>Nonemployer Statistics</b>	
2002 Nonemployer Statistics	Released
2003 Nonemployer Statistics	Released
2004 Nonemployer Statistics	Released
2005 Nonemployer Statistics	Oct 2007
2006 Nonemployer Statistics	Oct 2008
2007 Nonemployer Statistics	Oct 2009
2008 Nonemployer Statistics	Oct 2010
2009 Nonemployer Statistics	Oct 2011
2010 Nonemployer Statistics	Oct 2012
2011 Nonemployer Statistics	Oct 2013
2012 Nonemployer Statistics	Oct 2014
2013 Nonemployer Statistics	Oct 2015
2014 Nonemployer Statistics	Oct 2016
2015 Nonemployer Statistics	Oct 2017
<b>Annual Survey of Manufactures</b>	
2004 Annual Survey of Manufactures – Cycle 1	Released
2004 Annual Survey of Manufactures – Cycle 2	Released
2005 Annual Survey of Manufactures – Cycle 1	Released
2005 Annual Survey of Manufactures – Cycle 2	Feb 2007
2006 Annual Survey of Manufactures – Cycle 1	Dec 2007

<b>Contract Period Major Data Product Releases</b>	<b>Public Release (approximate timing)</b>
2006 Annual Survey of Manufactures – Cycle 2	Feb 2008
2007 Annual Survey of Manufactures – Cycle 1	Dec 2008
2007 Annual Survey of Manufactures – Cycle 2	Feb 2009
2008 Annual Survey of Manufactures – Cycle 1	Dec 2009
2008 Annual Survey of Manufactures – Cycle 2	Feb 2010
2009 Annual Survey of Manufactures – Cycle 1	Dec 2010
2009 Annual Survey of Manufactures – Cycle 2	Feb 2011
2010 Annual Survey of Manufactures – Cycle 1	Dec 2011
2010 Annual Survey of Manufactures – Cycle 2	Feb 2012
2011 Annual Survey of Manufactures – Cycle 1	Dec 2012
2011 Annual Survey of Manufactures – Cycle 2	Feb 2013
2012 Annual Survey of Manufactures – Cycle 1	Dec 2013
2012 Annual Survey of Manufactures – Cycle 2	Feb 2014
2013 Annual Survey of Manufactures – Cycle 1	Dec 2014
2013 Annual Survey of Manufactures – Cycle 2	Feb 2015
2014 Annual Survey of Manufactures – Cycle 1	Dec 2015
2014 Annual Survey of Manufactures – Cycle 2	Feb 2016
2015 Annual Survey of Manufactures – Cycle 1	Dec 2016
2015 Annual Survey of Manufactures – Cycle 2	Feb 2017
<b>County Business Patterns</b>	
2004 County Business Patterns	Released
2005 County Business Patterns	July 2007
2006 County Business Patterns	July 2008
2007 County Business Patterns	July 2009
2008 County Business Patterns	July 2010
2009 County Business Patterns	July 2011
2010 County Business Patterns	July 2012
2011 County Business Patterns	July 2013
2012 County Business Patterns	July 2014
2013 County Business Patterns	July 2015
2014 County Business Patterns	July 2016
2015 County Business Patterns	July 2017
<b>Monthly Economic Indicator</b>	TBD

## Appendix J: Reference Documents

1. Bureau of Census Information Technology Plan, 1996
2. DADS II Requirements Management Plan (RMP)
3. Data Access and Dissemination Systems Office: An Overview, version 4, Nov 1, 2005

## Appendix K: Acronyms

ACS	American Community Survey
ACSO	American Community Survey Office
AFF	American FactFinder
AIAN	American Indian and Alaska Native
AQ	Advanced Query
BOC	Bureau of Census
CFS	Commodity Flow Survey
DADS	Data Access and Dissemination System
DPP	Data Product Production
DSCMO	Decennial Systems and Contract Management Office
DT	Detailed Tables
GCT	Geographic Comparison Tables
NES	Nonemployer Statistics
O&M	Operations and Maintenance
PDF	Portable Document Format
PUMS	Public Use Microdata Sample
QT	Quick Tables
RMP	Requirements Management Plan
RTM	Requirements Traceability Matrix
SBO	Survey of Business Owners
SF	Summary File
SOW	Statement of Work
SRD	System Requirements Document
SRS	System Requirements Specification
TBD	To Be Determined
TM	Thematic Maps
URM	User Role Matrix
VIUS	Vehicle Inventory Use Survey
VTG	Virtual Table Generator



## Appendix L: Glossary

Term	Definition
Census	A complete enumeration, usually of a population, but also of businesses and commercial establishments, farms, governments, and so forth.
Choropleth	
Customer	Any Census Bureau directorate requiring services from the Data Access and Dissemination Office.
Data Provider	Any Census Bureau organization making Census Bureau data available to the Data Access and Dissemination Office for use in tabulation or dissemination activities.
Data Set	An abstraction used to refer to a collection of products. These collections are typically related to a single tabulation output.
Decennial Census	The census of population and housing, taken by the Census Bureau in years ending in 0 (zero). Article I of the Constitution requires that a census be taken every ten years for the purpose of reapportioning the United States House of Representatives.
Dissemination	The term is used broadly to refer to any activity following the completion of tabulation activities that contributes to putting Census Bureau data and information in the hands of end-users.
Economic Census	Collective name for the censuses of construction, manufactures, minerals, minority- and women-owned businesses, retail trade, service industries, transportation, and wholesale trade, conducted by the Census Bureau every five years, in years ending in 2 and 7.
End User	Anyone, either within or without the Census Bureau, who uses associated Census Bureau data and information.
End User Intermediary	The first line of contact for end users who need assistance in using and understanding dissemination products.
Environment	
Geographic Data Provider	Internal partners who provide geographic tabular and spatial data and metadata to support tabulation and dissemination.
Geography	Any spatial unit used by the Census Bureau for data collection and tabulation. The spatial unit may be formed by legal or statistical boundaries. Examples are states, counties, places, county subdivisions, census tracts and census blocks. An instance of a spatial unit. For example, Alaska or Middlesex County, Connecticut.
Internet User	Any end-user who gains access to Census Bureau data and information using the Internet.
Intranet	The local and wide-area network maintained by the Census Bureau for internal use. In this paper, the term does not connote exclusive use of the HTTP protocol.
Island Areas	Refers to the following United States territories and protectorates: Virgin Islands of the United States, Guam, Commonwealth of the Northern Mariana Islands, and American Samoa.
Microdata	A collection of data reflecting responses taken from individual data collection instruments.
Micropolitan	
Operations	
Population Estimate	Population estimates are basic population counts released between decennial censuses. Population estimates are released as of July 1 for each year.
Population Projection	Population projections are estimates of future counts of the resident

Term	Definition
	population, families and households
Product	A term used broadly to refer to any Census Bureau sponsored output of Census Bureau data or information.
Product Definer	Any member of a team of individuals responsible for determining the characteristics of a product, including content and format.
Product Distributor	A Census Bureau organization responsible for activities related to both the production and distribution of Census Bureau data and information for products requiring physical distribution, such as products made available on optical media or in print.
Product Specification	A document providing detailed description of the outputs of a tabulation or dissemination activity.
Program Sponsor	Any Census Bureau organization directly responsible for a census, survey, estimate or projection.
Quinquennial	Occurring every five years; see Economic Census
Reference Map	Maps that graphically describe the bounds of geographies used in tabulation.
Reviewer	Typically, a statistician or analyst responsible for examining the outputs of tabulation or dissemination activities for quality control purposes.
Summary Data	Summary data is a collection of data containing only aggregate representations (counts, sums, medians, means, etc.) of the contents of a microdata source.
Survey	A data collection activity involving observation or questionnaires for a sample of a population.
Survey and Census Data Provider	Internal customers who provide census and survey results for tabulation or dissemination.
Tabulation	A collection of activities required to produce summary data from microdata.
Technical	
Thematic Map	Maps that are used to visualize geographic patterns in data by coloring or shading each geographic area based on an associated data value.
United States	The 50 states and the District of Columbia.